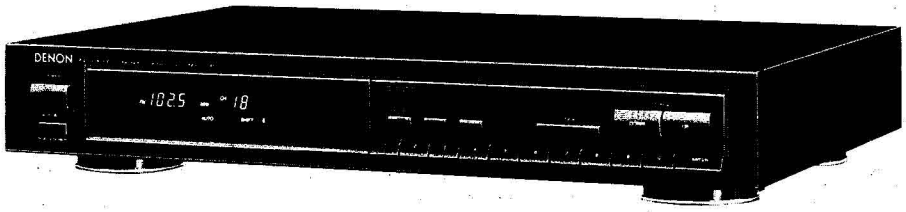
DENON

Hi-Fi AM-FM Stereo Tuner

SERVICE MANUAL

MODEL TU-460/460L

TU-460
2-BAND (AM-FM) STEREO TUNER
TU-460L
3-BAND (LW-MW-FM) STEREO TUNER



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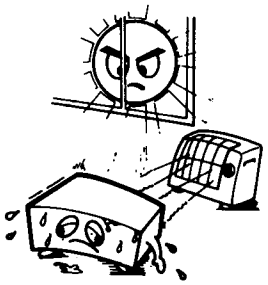
NIPPON COLUMBIA CO., LTD.

Except U.S.A. and Canada Version

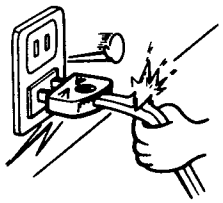
NOTE ON USE/HINWEISE ZUM GEBRAUCH/OBSERVATIONS RELATIVES A L'UTILISATION NOTE SULL'USO/NOTAS SOBRE EL USO/ALVORENS TE GEBRUIKEN/OBSERVERA



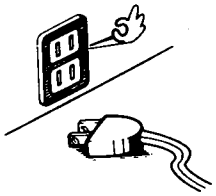
- Be careful of high temperatures.
- Vor hohen Temperaturen schützen.
- Prendre garde aux fortes températures.
- Evitate alte temperature.
- Tenga cuidado de las altas temperaturas.
- Vermijd hoge temperaturen.
- Undvik höga temperaturer.

- Installation in a cabinet.
- Aufstellung in einem Schrank oder Regal.
- Installation dans un coffret.
- Installazione in un mobile.
- Instalación en un gabinete.
- Installatie in een rek.
- Installering i skåp.

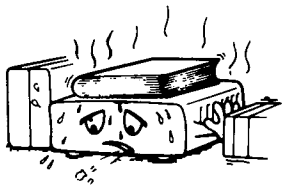
- Humidity, water and dust must be prohibited.
- Vor Feuchtigkeit, Nässe und Staub schützen!
- L'humidité, l'eau et la poussière sont à éviter.
- Evitate ogni contatto con umidità, acqua o polvere.
- Humedad, agua y polvo deben serevitados.
- Vermijd vochtigheid, water en stof.
- Undvik fukt, vatten och damm.



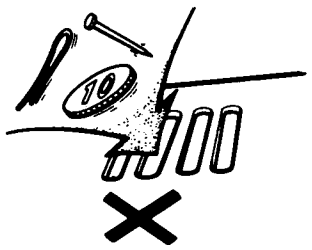
- Be careful with the power supply cord.
- Vorsicht bei der Handhabung des Netzkabels!
- Manipuler le cordon d'alimentation avec soin.
- Maneggiate con curail cavo d'alimentazione.
- Tenga cuidado con el cordón de alimentación.
- Wees voorzichtig met het spanningssnoer.
- Var aktsam om nätsladden.



- Disconnect the power plug during your absence.
- Trennen Sie den Netzstecker während Ihrer Abwesenheit ab.
- Déconnectez la prise d'alimentation pendant votre absence.
- Disinnestate il filo di alimentazione durante la vostra assenza.
- Deconecte la clavija de alimentación durante su ausencia.
- De stekker uit het stopkontakt laten tijdens uw afwezigheid.
- Dra stickkontakten ur el-uttaget om du kommer att vara borta hemmaifrån under längre tid.



- Do not place objects on top of the ventilation holes.
- Keine Gegenstände auf bzw. vor die Entlüftungsöffnungen stellen!
- Ne pas placer d'objets sur les orifices de ventilation de l'appareil.
- Non sistemate oggetti sulle aperture di ventilazione.
- No coloque objetos sobre las ranuras de la ventilación.
- Geen voorwerpen boven op de ventilatieopeningen plaatsen.
- Täck inte över ventilationshålen.



- Do not allow foreign matter to get inside the equipment.
- Keine Fremdkörper ins Geräteinnere gelangen lassen!
- Eviter l'entrée de matériaux étrangers dans l'appareil.
- Fate attenzione che oggetti estranei non penetrino all'interno dell'unità.
- No permita que materias extrañas se introduzcan dentro del equipo.
- Laat geen vreemd materiaal in de apparatuur binnendringen.
- Inga främmande föremål i apparaten.

- Be sure to read and follow the instructions before using chemically treated cloth.
- Lesen und folgen Sie in jedem Fall den Anweisungen, bevor Sie ein chemisch behandeltes Tuch anwenden.
- Assurez-vous de lire et suivre les instructions avant d'utiliser un chiffon traité chimiquement.
- Fate attenzione di leggere e seguire le istruzioni prima di usare un panno che è stato preparato con dei prodotti chimici.
- Asegúrese de leer y seguir las siguientes instrucciones antes de usar un paño con tratamiento químico.
- Instrukties lezen en opvolgen alvorens chemisch behandelde doeken te gebruiken.
- Läs och följ anvisningarna noggrant innan en kemiskt behandlad torkduk används.

- Do not open the cabinet.
- Das Gehäuse nicht öffnen!
- Ne pas ouvrir le boîtier.
- Non aprite l'involucro.
- No abra el gabmete.
- De behuizing niet openen.
- Öppna inte apparatens hölje.

• FOR UNITED KINGDOM MODEL ONLY

WARNING:

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

FÜR DEUTSCHE MODELL NUR

Die Deutsche Bundespost informiert

Sehr geehrter Rundfunkteilnehmer,

Dieses Gerät ist von der Deutschen Bundespost als Ton- bzw. Fernseh-Rundfunkempfänger zugelassen. Es entspricht den zur Zeit geltenden Technischen Vorschriften der Deutschen Bundespost und ist zum Nachweis dafür mit der DBP-Prüfnummer.....gekennzeichnet. Bitte überzeugen Sie sich selbst.
Dieses Gerät darf im Rahmen der nachstehend abgedruckten »Allgemeinen Genehmigung für Ton- und Fernseh-Rundfunkempfänger« in der Bundesrepublik Deutschland betrieben werden. Beachten Sie aber bitte, daß aufgrund dieser Allgemeinen Genehmigung nur Sendungen des Rundfunks empfangen werden dürfen. *) Wer unbefugt andere Sendungen (z.B. des Polizeifunks, des Seefunks, der öffentlichen beweglichen Landfunkdienste) empfängt, verstößt gegen die Genehmigungsauflagen und macht sich daher nach § 15 Absatz 2a des Gesetzes über Fernmeldeanlagen strafbar.
Die Kennzeichnung mit der DBP-Prüfnummer bietet Ihnen die Gewähr, daß dieses Gerät keine anderen Fernmeldeanlagen einschließlich Funkanlagen stört. Die Zusatzbuchstaben S. SE oder SK bei der DBP Prüfnummer besagen außerdem, daß das Gerät gegen störende Beeinflussungen durch andere Funkanlagen (z.B. des Amateurfunks, des CB-Funks) weitgehend unempfindlich ist. Sollten ausnahmsweise trotzdem Störungen auftreten, so wenden Sie sich bitte an die örtlich zuständige Funkstörungsmeßstelle.

Allgemeine Genehmigung für Ton- und Fernseh-Rundfunkempfänger

Die Allgemeine Ton- und Fernseh-Rundfunkgenehmigung vom 11.12.1970 (veröffentlicht im Bundesanzeiger Nr. 234 vom 16.12.1970) wird unter Bezug auf Abschnitt III der Genehmigung durch folgende Fassung der Allgemeinen Genehmigung für Ton- und Fernseh-Rundfunkempfänger gemäß den §§ 1 und 2 des Gesetzes über Fernmeldeanlagen ersetzt.

Genehmigung für Ton- und Fernseh-Rundfunkempfänger

I.

1. Die Errichtung und der Betrieb von Ton- und Fernseh-Rundfunkempfängern werden nach §§ 1 und 2 des Gesetzes über Fernmeldeanlagen in der Fassung der Bekanntmachung vom 17.3.1977 (BGBl. I, S. 459) allgemein genehmigt.
2. Ton- und Fernseh-Rundfunkempfänger im Sinne dieser Genehmigung sind Funkanlagen gemäß § 1 Abs. 1 des Gesetzes über Fernmeldeanlagen, die ausschließlich die für Rundfunkempfänger zugelassenen Frequenzabstimmbereiche**) aufweisen und zum Aufnehmen und gleichzeitigen Hör- oder Sichtbarmachen von Ton- oder Fernseh-Rundfunksendungen bestimmt sind. Zum Empfänger gehören auch eingebaute oder mit ihm fest verbundene Antennen sowie bei Unterteilung in mehrere Geräte die funktionsmäßig zugehörenden Geräte.
Außer für den Empfang von Rundfunksendungen dürfen Ton- und Fernseh-Rundfunkempfänger nur mit besonderer Genehmigung der Deutschen Bundespost für andere Fernmeldezwecke zusätzlich benutzt werden.
In den Empfänger eingebaute oder sonst mit ihm verbundene Zusatzgeräte (z.B. Ultraschallfernmeldeanlagen, infrarotfernmeldeanlagen) werden von dieser Genehmigung nicht erfaßt (ausgenommen die Einrichtungen zum Empfang des Verkehrsrundfunks). Desgleichen sind andere technische Empfängereigenschaften, die über den eigentlichen Zweck eines Rundfunkempfängers hinausgehen (z.B. zum Empfang anderer Funkdienste, für die Wiedergabe im Rahmen von Textübertragungsverfahren) hierdurch nicht genehmigt. Hierfür gelten besondere Regelungen.

II.

Diese Genehmigung wird unter nachstehenden Auflagen erteilt.
1. Ton- und Fernseh-Rundfunkempfänger müssen den jeweils geltenden Technischen Vorschriften für Ton- und Fernseh-Rundfunkempfänger entsprechen. Eingebaute Zusatzgeräte müssen den für sie geltenden Bestimmungen und technischen Vorschriften genügen.
Änderungen der Technischen Vorschriften, die im Amtsblatt des Bundesministers für das Post- und Fernmeldewesen veröffentlicht werden, muß bei schon errichteten und in Betrieb genommenen Ton- und Fernseh-Rundfunkempfängern nachgekommen werden, wenn durch den Betrieb dieser Rundfunkempfänger andere elektrische Anlagen gestört werden.
Serienmäßig hergestellte Ton- und Fernseh-Rundfunkempfänger müssen zum Nachweis dafür, daß sie den Technischen Vorschriften entsprechen, mit einer DBP-Prüfnummer gekennzeichnet sein.***) Die DBP-Prüfnummer sagt über die elektrische und mechanische Sicherheit und die Einhaltung der Strahlenschutzbestimmungen nichts aus.
2. Ton- und Fernseh-Rundfunkempfänger dürfen an ortsfesten oder nichtortsfesten Rundfunk-Empfangsantennenanlagen, -Verteilanlagen oder Kabelfernsehanlagen betrieben und im Rahmen der Bestimmungen über private Drahtfernmeldeanlagen mit Drahtfernmeldeanlagen verbunden werden.
Auf demselben Grundstück oder innerhalb eines Fahrzeuges dürfen Ton- und Fernseh-Rundfunkempfänger mit anderen Geräten oder sonstigen Gegenständen (z.B. Plattenspieler, Magnetaufzeichnungs- und -Wiedergabegeräte, Antennen) verbunden werden, sofern diese Geräte von der Deutschen Bundespost genehmigt sind oder keiner Genehmigung bedürfen.
Die räumliche Kombination von Funkanlagen mit Ton- oder Fernseh-Rundfunkempfängern ist nur dann zulässig, wenn die betreffenden Funkanlagen je für sich genehmigt sind.
3. Mit Ton- oder Fernseh-Rundfunkempfängern dürfen aufgrund dieser Genehmigung nur Sendungen des Rundfunks empfangen werden, also übertragene Tonsignale (Musik, Sprache) und Fernsehsignale (nur Bildinformationen). Andere Sendungen (z.B. des Polizeifunks, der öffentlichen beweglichen Landfunkdienste, Datenübertragungen) dürfen nicht aufgenommen werden, werden sie jedoch unbeabsichtigt empfangen, so dürfen sie weder aufgezeichnet, noch anderen mitgeteilt, noch für irgendwelche Zwecke ausgewertet werden. Das Vorhandensein solcher Sendungen darf auch nicht anderen zur Kenntnis gebracht werden.
4. Durch Ton- oder Fernseh-Rundfunkempfänger darf der Betrieb anderer elektrischer Anlagen nicht gestört werden.
5. Änderungen der Ton- oder Fernseh-Rundfunkempfänger, die die zulässigen Frequenzabstimmbereiche der Empfänger erweitern, gehen über den Umfang dieser Genehmigung hinaus und bedürfen vor ihrer Ausführung einer besonderen Genehmigung der Deutschen Bundespost.
Wer aufgrund dieser Genehmigung einen Ton- oder Fernseh-Rundfunkempfänger betreibt, hat bei einer Änderung der kennzeichnenden Merkmale von Ton- oder Fernseh-Rundfunksendern (insbesondere bei Änderung des Sendeverfahrens oder bei Frequenzwechsel) die ggf. notwendig werdenden Änderungen an den Rundfunkempfängern auf seine Kosten vornehmen zu lassen.
6. Die Deutsche Bundespost ist berechtigt, Rundfunkempfänger und mit ihnen verbundene Geräte darauf zu prüfen, ob die Auflagen der Genehmigung und die Technischen Vorschriften eingehalten werden.
Den Beauftragten der Deutschen Bundespost ist das Betreten der Grundstücke oder Räume, in denen sich Ton- oder Fernseh-Rundfunkempfänger befinden, zu den verkehrsüblichen Zeiten zu gestatten. Befinden sich die Rundfunkempfänger oder mit ihnen verbundene Geräte nicht im Verfügungsbereich desjenigen, der die Empfänger betreibt, so hat er den Beauftragten der Deutschen Bundespost Zutritt zu diesen Teilen zu ermöglichen.

III.

Bei Funkstörungen die nicht durch Mängel der Rundfunkempfänger oder der mit ihnen verbundenen Geräte verursacht werden, können die Funkmeßdienste der Deutschen Bundespost zur Feststellung der Störung in Anspruch genommen werden.

IV.

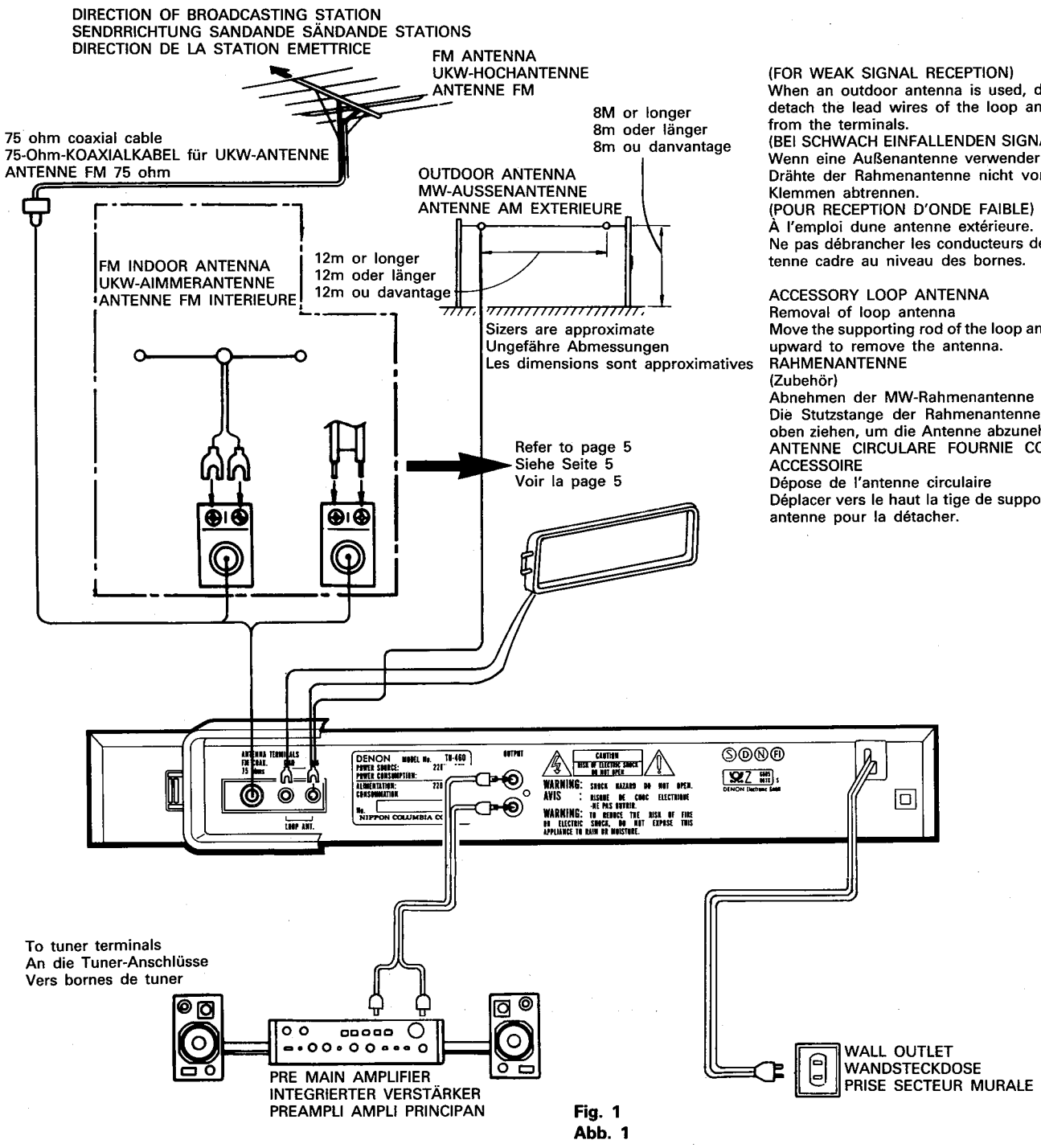
1. Diese Genehmigung kann allgemein oder durch die örtlich zuständige Oberpostdirektion einem einzelnen Betreiber gegenüber für einen bestimmten Rundfunkempfänger widerrufen werden. Ein Widerruf ist insbesondere zulässig, wenn die unter Abschnitt II aufgeführten Auflagen nicht erfüllt werden.
Anstatt die Genehmigung zu widerrufen, kann die Deutsche Bundespost anordnen, daß bei einem Verstoß gegen eine Auflage ein Ton- oder Fernseh-Rundfunkempfänger außer Betrieb zu setzen ist und erst bei Einhaltung der Auflagen wieder betrieben werden darf.
Die Auflagen dieser Genehmigung können jederzeit ergänzt oder geändert werden.
2. Diese Genehmigung ersetzt die Allgemeine Ton- und Fernseh-Rundfunkgenehmigung vom 11.12.1970. sie gilt ab 1.7.1979.

Bonn, den 14.5.1979

Der Bundesminister
für das Post- und Fernmeldewesen
Im Auftrag
Haist

*) Zum Empfang anderer Sendungen darf dieses Gerät nur mit Genehmigung der Deutschen Bundespost benutzt werden. Allgemein genehmigt ist zur Zeit der Empfang der Aussendungen von Amateurfunkstellen und der Normalfrequenz- und Zeitzeichensendungen.
**) Siehe Technische Vorschriften für Ton- und Fernseh-Rundfunkempfänger, veröffentlicht im Amtsblatt des Bundesministers für das Post- und Fernmeldewesen.
***) Für ausnahmsweise noch nicht gekennzeichnete, vor dem 1.7.1979 errichtete und in Betrieb genommene Ton-Rundfunkempfänger wird die Kennzeichnung nicht verlangt.

CONNECTIONS
ANSCHLUSS
CONNEXION

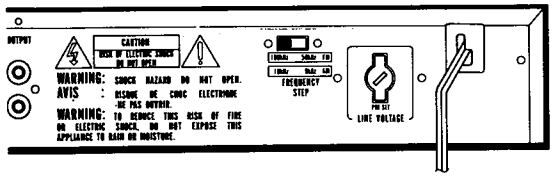


(FOR WEAK SIGNAL RECEPTION)
When an outdoor antenna is used, do not detach the lead wires of the loop antenna from the terminals.
(BEI SCHWACH EINFALLENDEN SIGNALES)
Wenn eine Außenantenne verwender wird. Drähte der Rahmenantenne nicht von den Klemmen abtrennen.
(POUR RECEPTION D'ONDE FAIBLE)
À l'emploi dune antenne extérieure.
Ne pas débrancher les conducteurs de l'antenne cadre au niveau des bornes.

ACCESSORY LOOP ANTENNA
Removal of loop antenna
Move the supporting rod of the loop antenna upward to remove the antenna.
RAHMENANTENNE
(Zubehör)
Abnehmen der MW-Rahmenantenne
Die Stutzstange der Rahmenantenne nach oben ziehen, um die Antenne abzunehmen.
ANTENNE CIRCULARE FOURNIE COMME ACCESSOIRE
Dépose de l'antenne circulaire
Déplacer vers le haut la tige de support de l antenne pour la détacher.

Fig. 1
Abb. 1

• MULTI-VOLTAGE MODEL ONLY



Setting the line voltage

- The customer can set the VOLTAGE SELECTOR KNOB on the back panel for appropriate line voltage by using a screwdriver.
- Do not use excessive force in setting the VOLTAGE SELECTOR KNOB – you may damage it.
- If the VOLTAGE SELECTOR KNOB does not turn smoothly, call qualified service personnel.

• ANTENNA INSTALLATION
• ANTENNEN
• MISE EN PLACE D'UNE ANTENNE

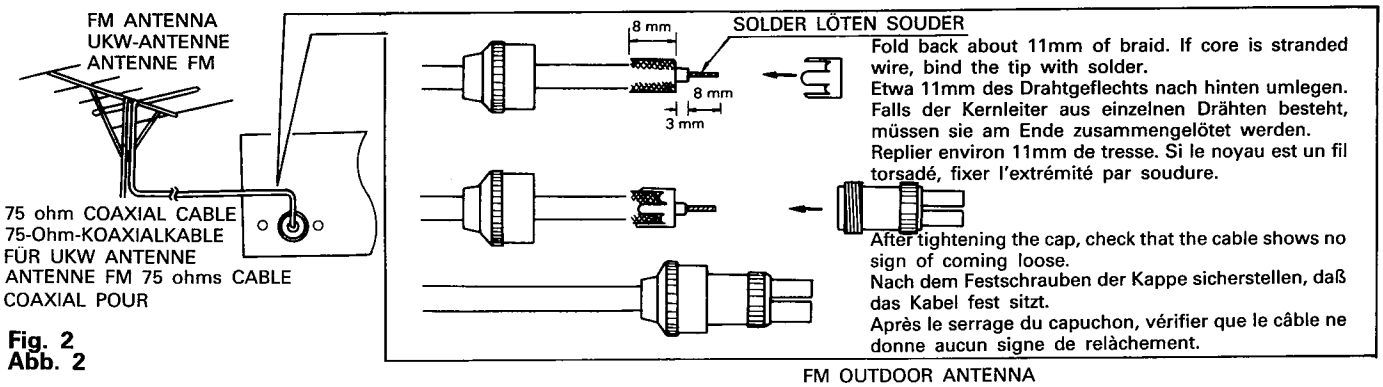

FM ANTENNA
UKW-ANTENNE
ANTENNE FM
75 ohm COAXIAL CABLE
75-Ohm-KOAXIALKABLE
FÜR UKW ANTENNE
ANTENNE FM 75 ohms CABLE
COAXIAL POUR
8 mm
SOLDER LÖTEN SOUDER
8 mm
3 mm
Fold back about 11mm of braid. If core is stranded wire, bind the tip with solder.
Etwa 11mm des Drahtgeflechts nach hinten umlegen. Falls der Kernleiter aus einzelnen Drähten besteht, müssen sie am Ende zusammengelötet werden.
Replier environ 11mm de tresse. Si le noyau est un fil torsadé, fixer l'extrémité par soudure.
After tightening the cap, check that the cable shows no sign of coming loose.
Nach dem Festschrauben der Kappe sicherstellen, daß das Kabel fest sitzt.
Après le serrage du capuchon, vérifier que le câble ne donne aucun signe de relâchement.

Fig. 2
Abb. 2

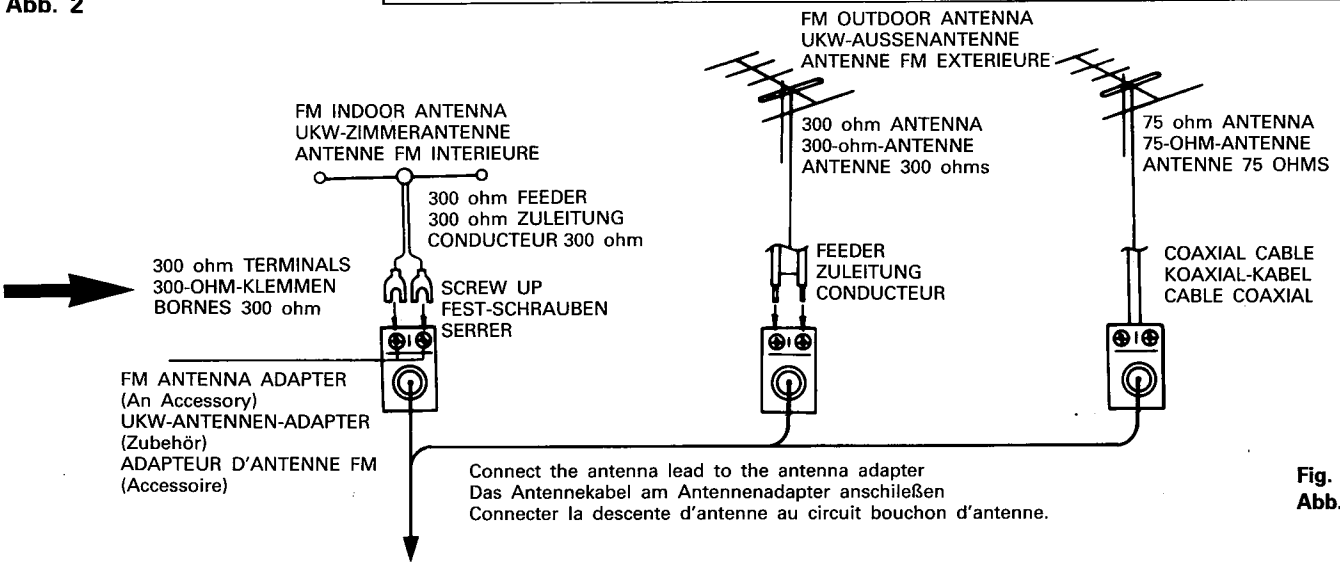
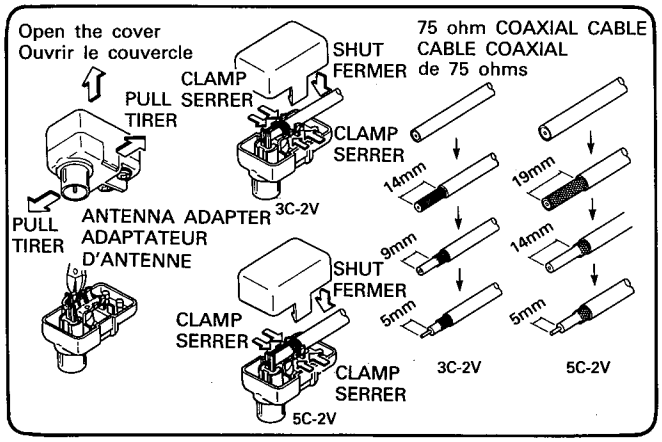
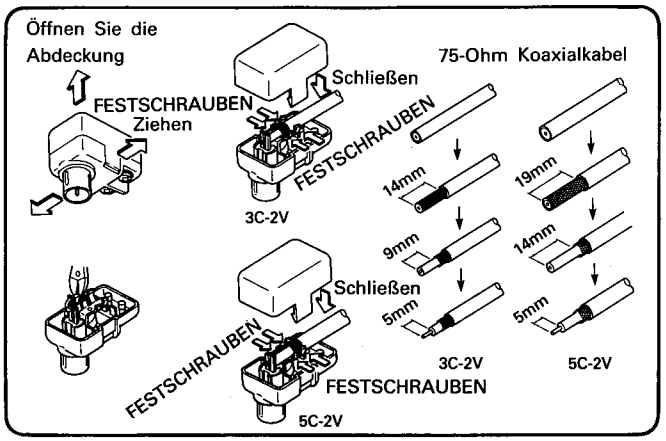


Fig. 3
Abb. 3



For English Readers/Pour les lecteurs (Français)



Für Deutshe Leser

Note:
- Please keep away AM loop antenna lead terminals from the metal parts of the back panel.

Bitte beachten:
- Die Anschlüsse der MW/KW/LW-Wurfantenne (AM) dürfen die Metallteile der Geräte-Rückseite nicht berühren.

Remarque:
- Eloigner les bornes de l'antenne en boucle AM de toute partie métallique du panneau arrière.

FRONT PANEL

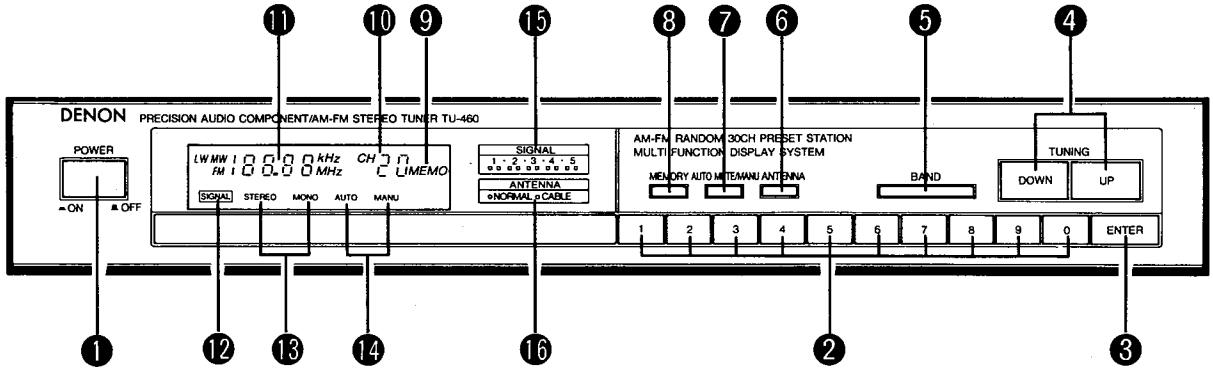


Fig. 4

DESIGNATIONS AND FUNCTIONS OF PANEL CONTROLS

❶ POWER (Power ON/OFF Switch)
The unit works 2-3 seconds after this switch is turned on.

❷ TEN KEYS (Ten Key Buttons)
Used to specify numbers for Memory, Auto Memory and Preset Call. Channels 1-30 can be specified using these buttons.
Preset Call Setting Method
A station that has already been preset can be fetched by the following method.
Pressing [1], [2], [ENTER] in order fetches the station present in memory for channel 12.

❸ ENTER (Enter Button)
Used for setting Memory, and preset Call.

❹ TUNING (Tuning Buttons)
Used to change the received frequency to a higher frequency (UP) or a lower frequency (DOWN).

❺ BAND (Band Button)
Selects between FM or AM.
TU-460L: Pressing this button changes the tuner from FM to MW to LW, then back to FM, in that order.

❻ ANTENNA (Antenna Switching Button)
Use this button to switch the antenna to receive a cable station or a regular station.
The antenna modes can be stored in the memory.

❼ AUTO MUTE/MANU (Tuning Mode Button)
This switches between auto and manual tuning.
Auto tuning: When the UP key is pressed, the radio is tuned automatically to a higher frequency. Press the DOWN key to tune to a lower frequency. Use this position to eliminate noise when no signals or weak signals are being received.
Manual tuning: In this position, the radio can be tuned manually.
TU-460L: Not available in this model, during reception of LW only.

❽ MEMORY (Memory Button)
Used to store the frequency of the station currently received.
Pressing [MEMORY], [1], [2], [ENTER] in order stores the station on channel 12 in memory. Up to 30 channels of either FM or AM can be stored in memory.

❾ MEMORY (Memory Indicator)
This indicator lights when the MEMORY button ❽ is pressed.

❿ CHANNEL (Channel Indicator)
This displays the number of the channel at which the station is stored.

⓫ DIGITAL FREQUENCY INDICATOR
Reception frequencies are digitally indicated with numbers. The FM frequency unit is MHz; the AM frequency unit is kHz.

⓬ SIGNAL (Signal Indicator)
This lights when a station can be received.

⓭ STEREO/MONO (Stereo/Mono Indicator)
"STEREO" lights automatically when receiving a stereo broadcast.
"MONO" lights when receiving a monaural broadcast or no broadcast at all.

⓮ TUNING MODE (AUTO/MANUAL)
Pressing MODE ❼ causes "AUTO" and "MANUAL" to light up alternately.
TU-460L: Pressing this button does not switch the tuner to Auto Tuning Mode, during reception of LW only.

⓯ SIGNAL (Signal-Strength Indicators)
The number of LEDs that light increases in correspondence with the strength of the signal being picked up by the antenna.

⓰ ANTENNA (Antenna Indicator)
The "NORMAL" or "CABLE" LED lights to indicate whether in the normal or cable mode (controlled by key ❻).

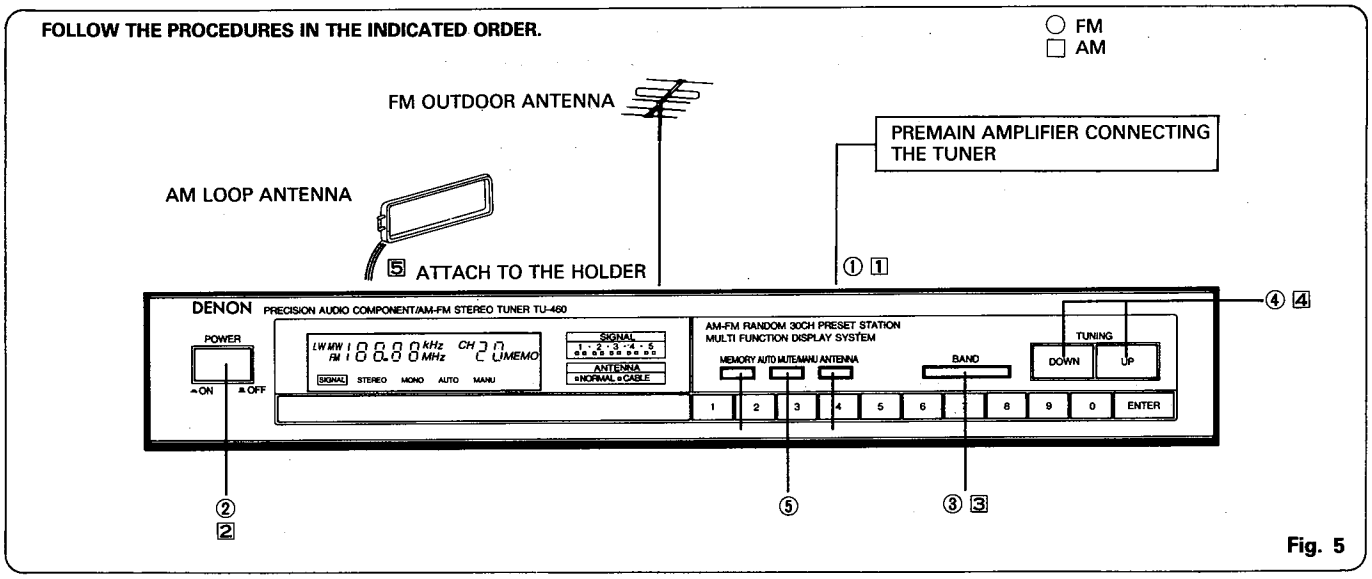


Fig. 5

OPERATION INSTRUCTIONS

PREPARATION

CHECKING CONNECTIONS

- Check all the connections by referring to connection diagram (Fig. 1).
- Check that the right (R) and left (L) channels of the speakers are connected to the corresponding right (R) and left (L) plugs, and check that polarities (positive and negative) are correctly matched.
- Check that the right (R) and left (L) pins are correctly inserted to the corresponding jacks.
- Check that all the cords are firmly connected.
  * Turn on the power with the POWER switch after checking all the connections.

CHECKING ANTENNA

1. Do not incorrectly connect the loop antenna. If you are not sure how to connect the loop antenna, refer to Fig. 1
2. Use of loop antenna: Keep the loop antenna away from the main body.; If the antenna contacts a metal body, reception sensitivity is degraded, thus resulting in unclear reproduction.

Multi-voltage model only

Setting the frequency step

Set the FREQUENCY STEP switch as described below.

- In the U.S.A. and Canada – set the switch to 100 kHz/10 kHz side.
  With this setting, the frequency varies in 100 kHz steps in the range of 87.5 to 108.0 MHz (FM) and in 10 kHz steps in 520 to 1710 kHz (AM).
- Elsewhere – set the switch to 50 kHz/9 kHz side.
  With this setting, the frequency varies in 50 kHz steps in the range of 87.50 to 108.00 MHz (FM) and in 9 kHz steps (AM) in 522 to 1611 kHz (AM).

CAUTION

1. Noise may be generated if a near-by television set is on during AM broadcasting reception. The tuner should be used as far away from a television as possible.
2. Effective period of memory back-up is about a month under normal temperature. If the memorized stations cannot be called back, preset the stations again.

Technical Data (typical value)	Technische Daten (typische Werte)	Caractéristiques techniques (valeur caractéristique)	
•FM SECTION	**•UKW-EMPFANGSTEIL**	**•SECTION FM**	
Frequency Range	Abstimmbereich	Plage de fréquence	87.5 MHz~108.0 MHZ
Antenna Terminals	Antennenklemmen	Bornes d'Antenne	75 ohm Unbalanced
Usable Sensitivity	Nutzbare Empfindlichkeit (DIN)	Sensibilité Pratique	0.8 µV (9.3 dBf) (DIN) 1.0 µV (11.2 dBf) (IHF)
S/N 50 dB Sensitivity	Empfindlichkeit bei 50 dB	Sensibilité S/B à 50 dB	
Monaural	Störabstand Mono	Mono	1.7 µV (15.9 dBf)
Stereo	Stereo	Estéréo	23 µV (38.5 dBf)
(µV is at 75 ohm, 0 dBf = 10^{-15}W)	(Gemessen bei 75 Ohm, 0 dBf = 10^{-15}W)	(µV à 75 ohms, 0 dBf = 10^{-15}W)	
[New IHF Standard]	[Nach neuem IHF-Standard]	[Nouveau Standard IHF]	
Image Interference Ratio	Spiegelfrequenzdämpfung	Rapport d'Interférence Image	65 dB
IF Interference Ratio	ZF-Unterdrückung	Rapport d'Interférence IF	80 dB
AM Suppression Ratio	AM-Unterdrückung	Rapport de Suppression AM	50 dB
Effective Selectivity	Effektive Selektivität	Sélectivité Effective	75 dB (±400 kHz)
Capture Ratio	Gleichwellenselektion	Rapport de Captage	1.5 dB
Frequency Characteristics	Frequenzgang	Caractéristique de Fréquence	20 Hz ~ 15 kHz $^{+0.5}_{-1.5}$ dB
Signal-to-noise Ratio	Geräuschspannungsabstand	Rapport de Signal-à Bruit	
Monaural	Mono	Mono	DIN 77 dB, 82 dB (IHF-A)
Stereo	Stereo	Stéréo	DIN 73 dB, 78 dB
Total Harmonic Distortion	Klirrfaktor	Distorsion Harmonique Table	
Mono 1 kHz (at 75 kHz dev.)	Mono 1 kHz (bei 75 kHz Hub)	Mono 1 kHz (2a unedév, de 75 kHz)	0.3%
Stereo 1 kHz (at 67.5 kHz dev.)	Stereo 1 kHz (bei 67,5 kHz Hub)	Stéréo 1 kHz (à une dév. des 67,5 kHz)	0.7%, 0.2% (DIN)
Stereo Separation 1 kHz	Kanaltrennung 1 kHz	Séparation Stéréo 1 kHz	40 dB
•AM SECTION (MW and LW)	**•EM-EMPFANGSTEIL**	**•SECTION AM**	
MEDIUM WAVE	MW-EMPFANGSTEIL	PETITES ONDES	
Frequency Range	Abstimmbereich	Plage de fréquence	522 kHz ~ 1611 kHz (For Europe) 520 kHz ~ 1710 kHz (For U.S.A., Canada)
Antenna Terminals	Antennenklemme	Bornes d'Antenne	Terminal Type with Loop Ant.
Usable Sensitivity	Nutzbare Empfindlichkeit	Sensibilité Utilisable	18 µV
Signal-to-noise Ratio	Geräuschspannungsabstand	Rapport de signal-à-Bruit	53 dB
LONG WAVE	LW-EMPFANGSTEIL	GRANDES ONDES	
Frequency Range	Abstimmbereich	Plage de fréquence	153 kHz ~ 281 kHz
Usable Sensitivity	Nutzbare Empfindlichkeit	Sensibilité Utilisable	30 µV
Signal-to-noise Ratio	Geräuschspannungsabstand	Rapporte de Signal-à-Bruit	50 dB
•OTHERS	**•SONTIGENS**	**•AUTRES**	
Power Supply	Netzspannung und frequenz	Alimentation	AC 220V or 240V 50 Hz, AC 120V 60 Hz AC 110/120/220/240V 50/60 Hz (Multiple)
Power Consumption	Leistung saufnahme	Puissance absorbée	12 W
Dimensions (W)×(H)×(D)	Abmessungen (L)×(H)×(T)	Dimensions (L)×(H)×(D)	434 (17-3/32")(W) × 73 (2-7/8")(H) × 287 (11-19/64") mm
Net Weight	Nettogewicht	Poids	3.1 kg (6 lbs 13 oz)

- Specifications and contents are subject to change without notice for purposes of improvement.
- Änderungen des Inhalts und der technischen Daten zum Zwecke der Verbesserung vorbehalten.
- Spécifications et contenu sont sujets à modification sans préavis.

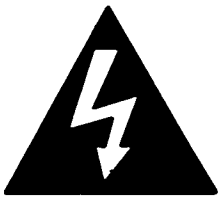
U.S.A. and Canada Version

ADVICE FOR USE

- Do not place the set in direct sunlight, in hot areas such as near heating equipment, with high humidity or dust levels. This may cause damage to the unit.
- Check that all parts are connected correctly before turning on the power source.
- When user is absent for long periods, be sure to remove plug from wall socket.
- Do not use insecticide, benzene or thinner near the unit, or the cabinet color will fade. Avoid using polish: use a soft cloth (e.g. silicon cloth).
- It is not recommended to place players, decks and other objects on the this appliance so that the ventilation openings are blocked.
  This will cause internal temperature rise and equipment failure. Do not use this appliance in a closed cabinet or container. This will cause internal temperature rise abnormally.

Technical Data (typical value)	**Caractéristiques techniques (valeur caractéristiques)**	
•FM SECTION	• SECTION FM	
Frequency Range	Plage de fréquence	87.5 MHz~108.0 MHZ
Antenna Terminals	Bornes d'Antenne	75 ohm Unbalanced
Usable Sensitivity	Sensibilité Pratique	0.9 μV (10.3 dBf)
S/N 50 dB Sensitivity	Sensibilité S/B à 50 dB	
Stereo	Stéréo	23 μV (38.5 dBf)
Monaural	Mono	1.6 μV (15.3 dBf)
μV at 75 ohm	μV à 75 ohms	
0 dBf=10^{-15} W	0 dBf=10^{-15} W	
Signal-to-noise Ratio (A-Weighted)	Rapport de Signal-à Bruit (A pondéré)	
Monaural	Mono	82 dB
Stereo	Stéréo	78 dB
Total Harmonic Distortion	Distortion Harmonique Table	
Mono 1 kHz (at 75 kHz dev.)	Mono 1 kHz (2a unedév, de 75 kHz)	0.08%
Stereo 1 kHz (at 67.5 kHz dev.)	Stéréo 1 kHz (à une dév. des 67.5 kHz)	0.15%
Capture Ratio	Rapport de Captage	1.5 dB
AM Suppression Ratio	Rapport de Suppression AM	50 dB
Image Interference Ratio	Rapport d'Interférence Image	45 dB
IF Interference Ratio	Rapport d'Interférence IF	85 dB
Effective Selectivity	Sélectivité Effective	50 dB (±400 kHz)
Frequency Characteristics	Caractéristiques de Fréquence	20 Hz~15 kHz $^{+0.5}_{-1.5}$ dB
Stereo Separation 1 kHz	Séparation Stéréeo 1 kHz	45 dB
•AM SECTION	• SECTION AM	
Frequency Range	Plage de fréquence	520 kHz~1710 kHZ
Antenna Terminals	Bornes d'Antenne	Terminal Type with Loop Ant.
Usable Sensitivity	Sensibilité Utilisable	18 μV
Signal-to-noise Ratio	Rapport designal-à-Bruit	53 dB
•OTHERS	• AUTRES	
Large Fluorescent Indicator	Indicateur fluorescent de grandes dimensions	
Power Supply	Alimentation	AC 120V 60 Hz
Power Consumption	Puissance absorbée	12W
Dimensions (W)×(H)×(D)	Dimensions (W)×(H)×(D)	434(W)×73(H)×287(D)mm (17-3/32"×2-7/8"×11-19/64")
Net Weight	Poids	3.1 kg (6 1bs 13 oz)

Design and Specifications are subject to change without prior notice.
Conception et Spécifications subjectes à modifications sans prévis.



CAUTION

RISK OF ELECTRIC SHOCK

DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltge" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION
POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

SAFETY INSTRUCTIONS

1. Read Instructions – All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions – The safety and operating instructions should be retained for future reference.
3. Heed Warnings – All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions – All operating and use instructions should be followed.
5. Water and Moisture – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands – The appliance should be used only with a cart or stand that is recommended by the manufacturer.

6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Wall or Ceiling Mounting – The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

10. Power Sources – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

11. Grounding or Polarization – The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

12. Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

13. Protective Attachment Plug – The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.

14. Cleaning – The appliance should be cleaned only as recommended by the manufacturer.

15. Power Lines – An outdoor antenna should be located away from power lines.

16. Outdoor Antenna Grounding – If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70–1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.

17. Nonuse Periods – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

18. Object and Liquid Entry – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

19. Damage Requiring Service – The appliance should be serviced by qualified service personnel when:

    A. The power-supply cord or the plug has been damaged; or

    B. Objects have fallen, or liquid has been spilled into the appliance; or

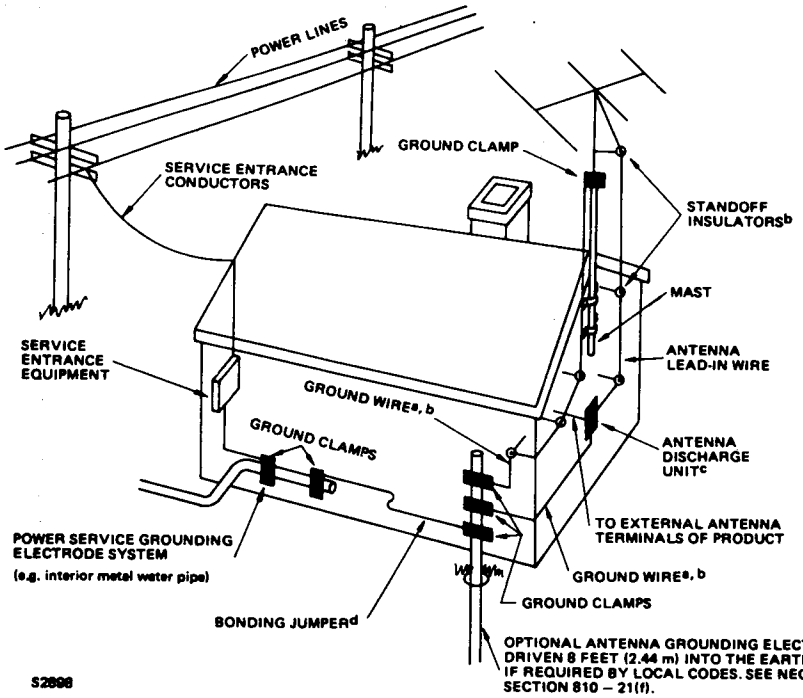
    C. The appliance has been exposed to rain; or

    D. The appliance does not appear to operate normally or exhibits a marked change in performance; or

    E. The appliance has been dropped, or the enclosure damaged.

20. Servicing – The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

FIGURE A
EXAMPLE OF ANTENNA GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 – "RADIO AND TELEVISION EQUIPMENT"



[a] Use No. 10 AWG (5.3 mm²) copper, No. 8 AWG (8.4 mm²) aluminum, No. 17 AWG (1.0 mm²) copper-clad steel or bronze wire, or larger, as a ground wire.

[b] Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4–6 feet (1.22–1.83 m) apart.

[c] Mount antenna discharge unit as close as possible to where lead-in enters house.

[d] Use jumper wire not smaller than No. 6 AWG (13.3 mm²) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(j).

CONNECTIONS
CONNEXION

DIRECTION OF
BROADCASTING STATION
DIRECTION DE LA STATION
EMETTRICE

FM ANTENNA
ANTENNE FM

USA MODEL ONLY

Note to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

8m or longer
8m ou davantage

OUTDOOR ANTENNA
ANTENNE AM EXTERIEURE

75 ohm coaxial cable
ANTENNE FM 75 ohms CABLE COAXIAL

FM INDOOR ANTENNA
(An Accessory)
ANTENNE FM INTERIEURE
(Accessoire)

12m or longer
12m ou davantage

300 ohm

FEEDER
FEEDER

SCREW UP
SERRER

300 ohm
TERMINALS

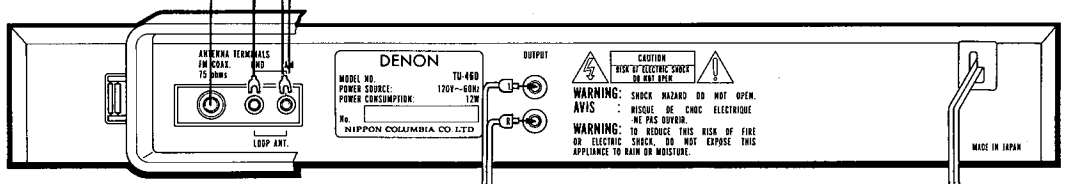
FM ANTENNA
ADAPTER
(An Accessory)
ADAPTER
D'ANTENNE FM
(Accessoire)

sizes are approximate
Les dimensions sont approximatives

(FOR WEAK SIGNAL RECEPTION)
When an outdoor antenna is used, do not detach the lead wires of the loop antenna from the terminals.
(POUR RECEPTION D'ONDE FAIBLE)
Lorsqu'une antenne extérieure est utilisée, ne pas détacher les fils de l'antenne en boucle de ses bornes.

ACCESSORY LOOP ANTENNA
Removal of loop antenna
Move the supporting rod of the loop antenna
upward to remove the antenna.

ANTENNE CIRCULARE FOURNIE COMME ACCESSOIRE
Dépose de l'antenne circulaire. Déplacer vers le haut la tige de support de l'antenne pour la détacher.



WALL OUTLET
PRISE SECTEUR MURALE

POWER OUTLET OF AMPLIFIER
PRISE SECTEUR DU PREAMPLI
AMPLI PRINCIPAL

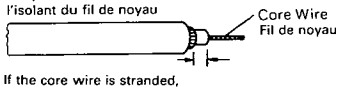
To "tuner" terminals
Vers les borners de "tuner"

PRE MAIN AMPLIFIER
PREAMPLI AMPLI PRINCIPAL

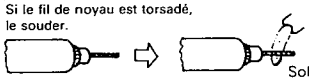
Fig. 1

• 75 ohm Coaxial Terminal

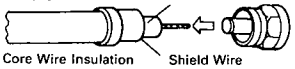
1. Cut off the shield and remove the core wire insulation.
Couper le fil blindé et retirer l'isolant du fil de noyau



2. If the core wire is stranded, solder it.
Si le fil de noyau est torsadé, le souder.



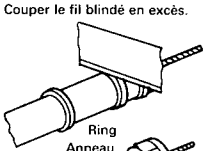
3. Spread out the shield wire with the ring and install the connector.
Etaler le fil blindé avec l'anneau et installer le connecteur



4. Core Wire Insulation
Isolant de fil de noyau
Shield Wire
Fil blindé

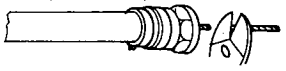
• Borne coaxiale 75 ohms

Cut off the excess shield wire.
Couper le fil blindé en excès.



5. Tighten the ring
Serrer l'anneau.

6. Cut of the excess core wire
Couper le fil de noyau en excès.



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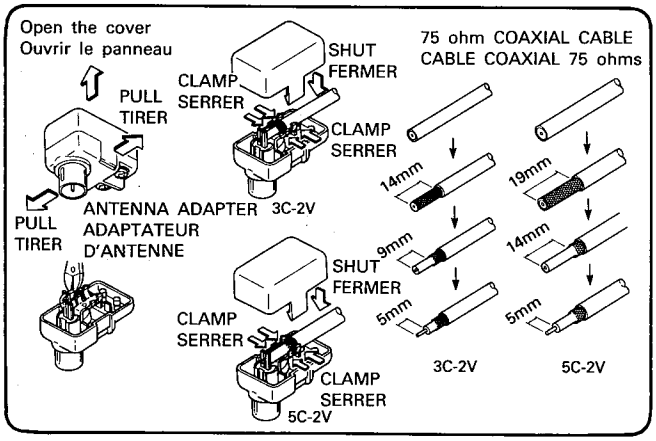


FRONT PANEL
PANNEAU AVANT

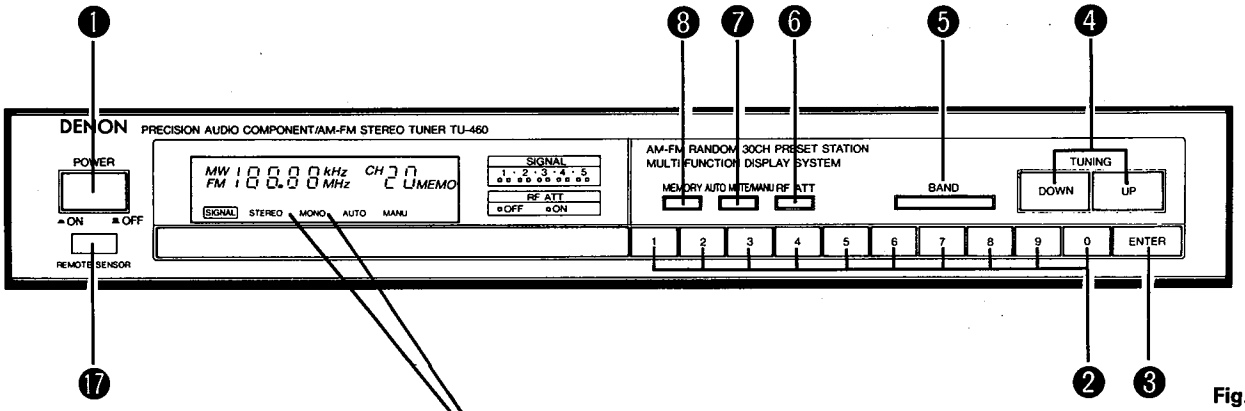
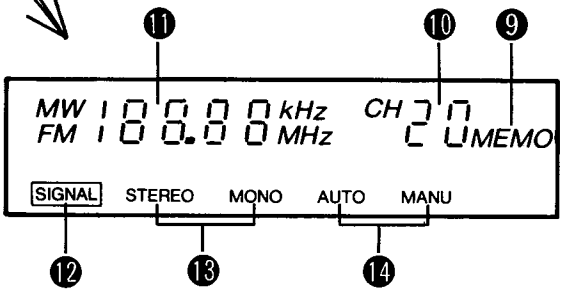
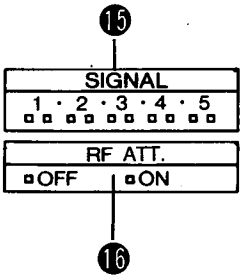


Fig. 2

Note:
- Please keep away AM Loop antenna lead terminals from the metal parts of the back panel

Note:
- Éloigner les bornes de l'antenne en boucle AM de toute partie métallique du panneau arrière.





FOLLOW THE PROCEDURES IN THE INDICATED ORDER.
SUIVRE LES DEMARCHES DANS L'ORDRE INDIQUE.

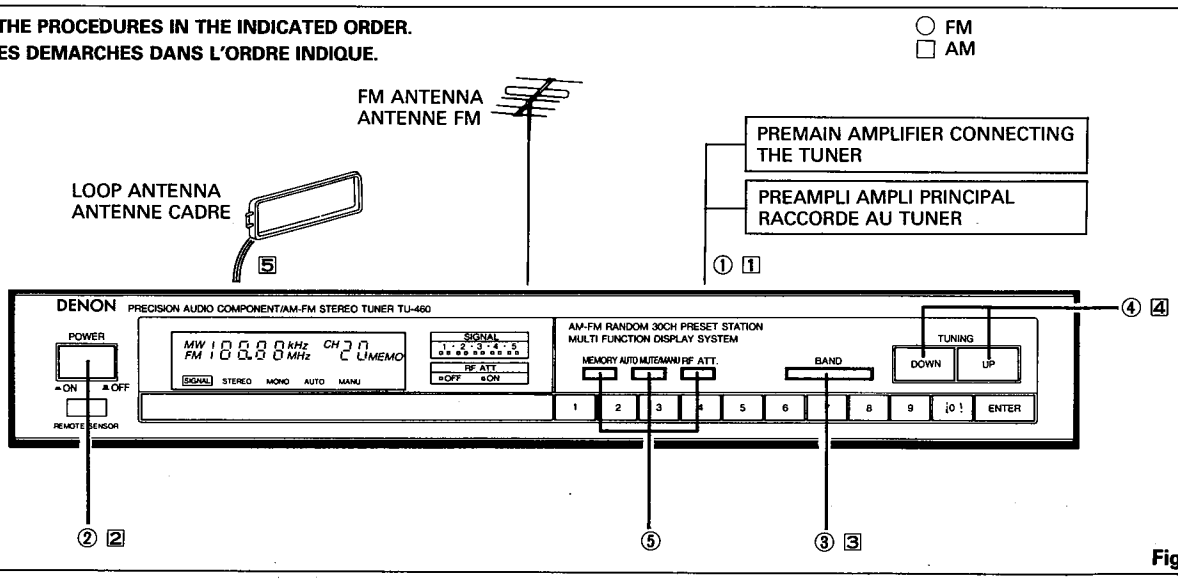


Fig. 3

CAUTION:
1. Noise may be generated if a near-by television set is on during AM broadcasting reception. The tuner should be used as far away from a television as possible.
2. Effective period of memory back-up is about a month under normal temperature. If the memorized stations cannot be called back, preset the stations again.

PRECAUTION:
1. Il y aura des bruits si un téléviseur situé à proximité est allumé lors de la réception d'émissions AM. Le tuner devrait etre utilisé le plus loin possible d'un téléviseur.
2. La période effective de référence en mémoire st d'environ un mois dans les conditions de température normale. Si les stations mises en mémoire ne peuvent pas être captées, recommencer le préréglage.

ENGLISH

DESIGNATIONS AND FUNCTIONS OF PANEL CONTROLS

❶ **POWER (Power ON/OFF Switch)**
The unit works 2-3 seconds after this switch is turned on.

❷ **TEN KEYS (Ten Key Buttons)**
Used to specify numbers for Memory and Preset Call. Channels 1-30 can be specified using these buttons.
Preset Call Setting Method
A station that has already been preset can be fetched by the following method.
Pressing [1], [2], [ENTER] in order fetches the station present in memory for channel 12.

❸ **ENTER (Enter Button)**
Used for setting Memory and Preset Call.

❹ **TUNING (Tuning Buttons)**
Used to change the received frequency to a highter frequency (UP) or a lower frequency (DOWN).

❺ **BAND (Band Button)**
Selects between FM or AM.

❻ **RF ATT. (RF Attenuator)**
This turns the antenna's attenuator on and off.
For clear reception, turn the attenuator off when signals are weak, on when signals are strong. The RF attenuator mode (on or off) can be stored in the memory.

❼ **AUTO MUTE/MANU (Tuning mode Button)**
This switches between auto and manual tuning.
Auto tuning: When the UP key is pressed, the radio is tuned automatically to a higher frequency. Press the DOWN key to tune to a lower frequency. Use this position to eliminate noise when no signals or weak signals are being received.
Manual tuning: In this position, the radio can be tuned manually.

❽ **MEMORY (Memory Button)**
Used to store the frequency of the station currently received.
Pressing [MEMORY], [1], [2], [ENTER] in order stores the station on channel 12 in memory. Up to 30 channels of either FM or AM can be stored in memory.

❾ **MEMORY (Memory Indicator)**
This indicator lights when the MEMORY button ❽ is pressed.

❿ **CHANNEL (Channel Indicator)**
This displays the number of the channel at which the station is stored.

⓫ **DIGITAL FREQUENCY INDICATOR**
Reception frequencies are digitally indicated with numbers. The FM frequency unit is MHz; the AM frequency unit is kHz.

⓬ **SIGNAL (Signal Indicator)**
This lights when a station can be received.

⓭ **STEREO/MONO (Stereo/Mono Indicator)**
"STEREO" lights automatically when receiving a stereo broadcast.
"MONO" lights when receiving a monaural broadcast or no broadcast at all.

⓮ **TUNING MODE (AUTO/MANUAL)**
Pressing MODE ❼ causes "AUTO" and "MANUAL" to light up alternately.

⓯ **SIGNAL (Signal-Strength Indicators)**
The number of LEDs that light increases in correspondence with the strength of the signal being picked up by the antenna.

⓰ **RF ATT. (RF Attenuator Indicator)**
The "OFF" or "ON" LED lights to indicate whether the attenuator is on or off (controlled by key ❻).

⓱ **REMOTE SENSOR (Remote Control Photosensitive Window)**
This sensor receives the infrared light transmitted from the wireless remote control unit.
When operating the wireless remote control unit, point it towards this sensor.
The wireless remote control unit included with the DENON AVC-2000, AVC-700 or DAP-2500 can be used to switch the preset channels up or down.

OPERATION INSTRUCTIONS

PREPARATION
CHECKING CONNECTIONS
- Check all the connections by referring to connection diagram (Fig. 1).
- Check that the right (R) and left (L) channels of the speakers are connected to the corresponding right (R) and left (L) plugs, and check that polarities (positive and negative) are correctly matched.
- Check that the right (R) and left (L) pins are correctly inserted to the corresponding jacks.
- Check that all the cords are firmly connected.
  * Turn on the power with the POWER switch after checking all the connections.

CHECKING ANTENNA
1. Do not incorrectly connect the loop antenna. If you are not sure how to connect the loop antenna, refer to Fig. 1.
2. Use of loop antenna: Keep the loop antenna away from the main body.; If the antenna contacts a metal body, reception sensitivity is degraded, thus resulting in unclear reproduction.

FRANCAIS

DESIGNATIONS ET FONCTIONS DES ELEMENTS DU PANNEAU DE COMMANDE

❶ POWER (Interrupteur d'alimentation)
Cet appareil commence à fonctionner 2 à 3 secondes aprés sa mise sous tension.

❷ TEN KEYS (Touches numériques)
Servent à indiquer le numéro d'ordre pour la mise en mémoire et le rappel des stations préréglées. Les canaux de 1 à 30 peuvent être spécifiés à l'aide de ces touches.
Procédé de rappel des stations en mémoire.
Une station mise en mémoire peut être rappelée comme suit:
Par exemple, presser successivement [1], [2], [ENTER] pour rappeler la station mise en mémoire sous le numéro 12.

❸ ENTER (Touche d'entrée)
Sert à la mise en mémoire et le rappel des stations en mémoire.

❹ TUNING (Commandes d'accord)
Permettent de passer à une fréquence plus élevée (UP) ou plus basse (DOWN) que cellen en cours de réception.

❺ BAND (Sélecteur de bande)
Permet de choisir entre FM et AM.

❻ RF ATT. (Atténuator RF)
Active et désactive l'atténuateur de l'antenne.
Pour obtenir une réception claire, mettre l'atténuateur hors service lorsque les signaux sont faibles et en service lorsque les signaux sont puissants. Le mode atténuateur RF (en service ou hors service) peut être conservé en mémoire.

❼ AUTO MUTE/MANU (Touche de mode de syntonisation)
Commute entre la syntonisation automatique et manuelle.
Syntonisation automatique: Lorsque la touche vers le haut (UP) est enfoncée, la radio est automatiquement syntonisée sur une fréquence plus élevée. Appuyer sur la touche vers le bas (DOWN) pour syntoniser sur une station plus basse. Utiliser cette position pour éliminer les parasites lorsqu'il n'y aucune réception de signaux ou de signaux faibles.
Syntonisation manuelle: Dans cette position, la radio peut être syntonisée manuellement.

❽ MEMORY (Commande de mise en mémoire)
Sert à mise en mémoire de la station en cours de réception.
Par exemple, presser successivement [MEMORY], [1], [2], [ENTER] pour mettre la station 12 en mémoire.

❾ MEMORY (Témoin de mémoire)
Ce témoin s'allume quand la touche MEMORY ❽ est pressée

❿ CHANNEL (Indicateur de canal)
Affiche le numéro de canal sur lequel la station est enregistrée.

⓫ DIGITAL FREQUENCY INDICATOR (Indicateur de fréquence numérique)
Les fréquences captées sont indiquées numériquement. L'unité en fréquence FM est MHz, celle en AM kHz.

⓬ SIGNAL (Indicateur de signal)
S'allume lorsqu'une station peut être reçue.

⓭ STEREO/MONO (Indicateur stéréo/mono)
"STEREO" s'allume automatiquement lors de la réception d'une émission stéréo.
"MONO" s'allume lors de la réception d'une émission mono ou lorsque aucune émission n'est reçue.

⓮ TUNING MODE (Indicateur auto/manuel)
La pression de la touche MODE ❼ provoque alternativement l'illumination de "AUTO" et "MANUAL".

⓯ SIGNAL (Indicateur de puissance de signal)
Le nombre de DEL allumées augmente en fonction de la puissance du signal capté par l'antenne.

⓰ RF ATT. (Indicateur de l'atténuateur RF)
La diode électro-luminescente "OFF" ou "ON" s'allume pour indiquer si l'atténuateur est en service ou pas. (commandé par la touche ❻).

⓱ CAPTEUR DE TELECOMMANDE (Fenêtre photosensible de la télécommande)
Ce capteur reçoit la lumière infrarouge transmise par la télécommande sans fil.
Lorsqu'on utilise la télécommande, la pointer en direction du capteur.
La télécommande fournie avec les amplificateurs d'ambiance DENON AVC-2000, AVC-700 ou DAP-2500 peuvent être utilisés pour commuter les stations préréglées vers le haut ou vers le bas.

INSTRUCTIONS

PREPARATION

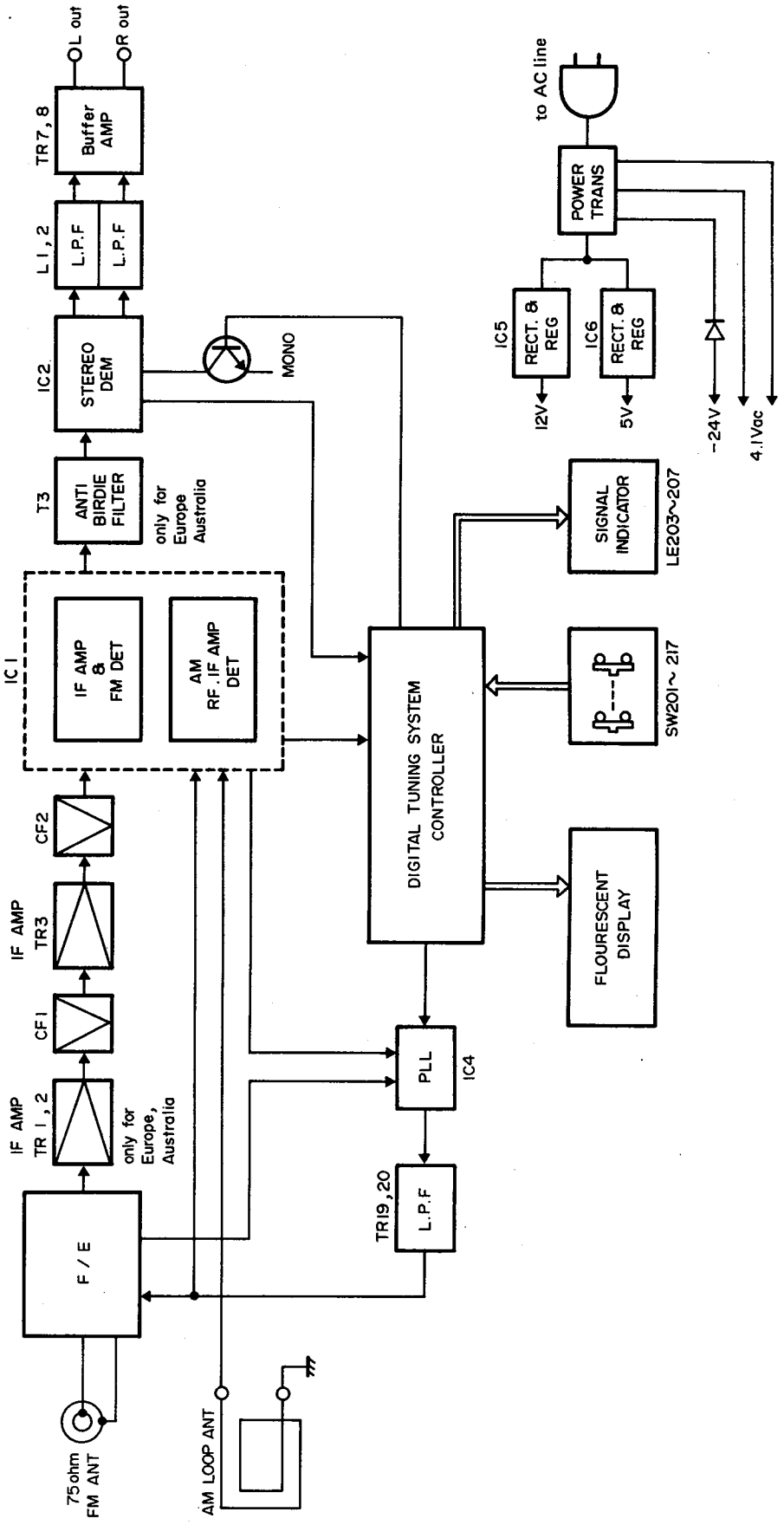
CONTROLE DES CONNEXIONS

- Vérifier toutes les connexions en se référant au schémades connexions (Fig. 1).
- Vérifier si les canaux droit (R) et gauche (L) des hautparleurs sont connectés aux prises droite (R) et gauche (L) correspondantes, et que les polarités (positive et négative) sont correctes.
- Vérifier si les broches droite (R) et gauche (L) sont convenablement insérées dans les fiches correspondantes.
- Vérifier is tous les cordons sont solidement connectés.
  * Ouvrir l'alimentation à l'aide du commutateur POWER après la vérification de toutes les connexions.

CONTROLE DE L'ANTENNE

1. Prendre soin de bien connecter l'antenne cadre. Si l'on est pas sûr de la manière de la connecter, se reporter à la Fig. 1.
2. Utilisation de l'antenne cadre: Maintenir l'antenne loin du corps principal de l'appareil. Si l'antenne est en contact avec un corps métallique, sa sensibilité de réception baissera, d'ou une reproduction peu claire.

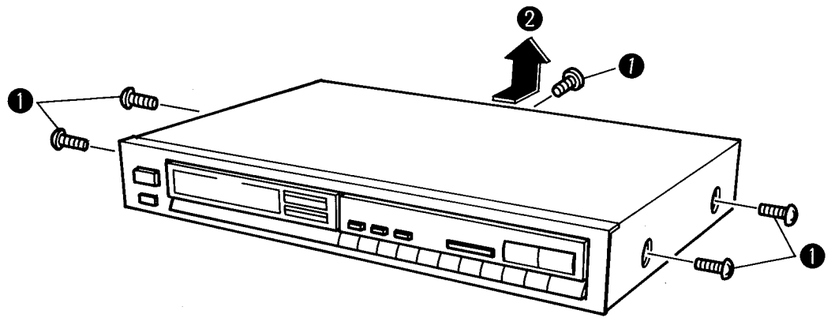
BLOCK DIAGRAM



REMOVAL OF EACH SECTION

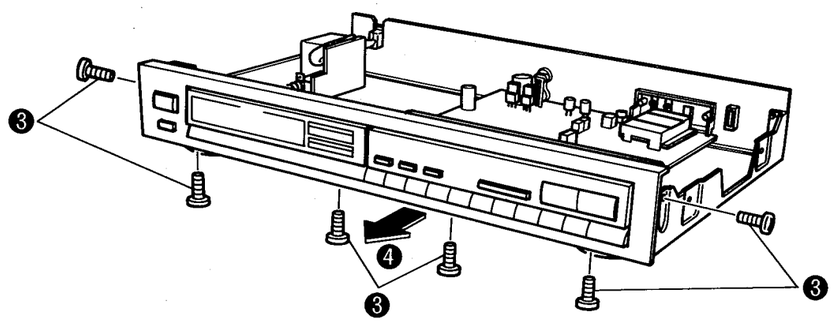
1. Removing the Top Cover

❶ Remove the five top cover installation screws (four on the sides, one on the rear).
❷ Slip the top cover slightly to the rear in the direction of the arrow, then lift it off.



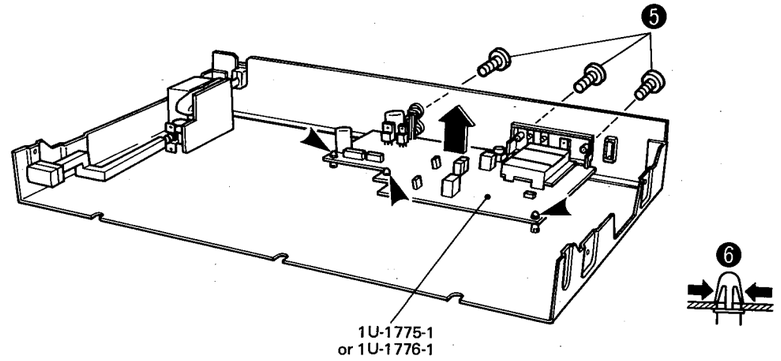
2. Removing the Front Panel Assembly

❸ Remove the six front panel assembly installation screws (two on the sides, four on the bottom).
❹ Pull the front panel assembly forward and off in the direction of the arrow.



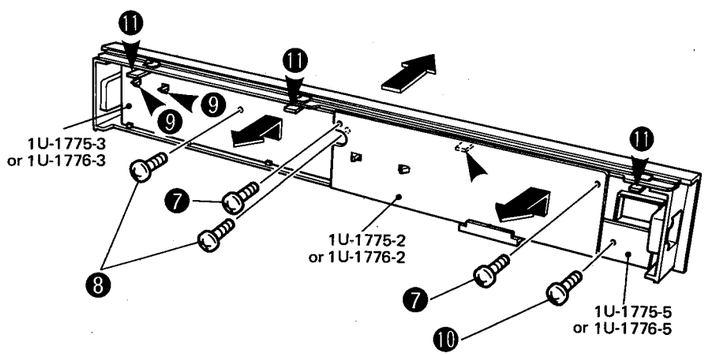
3. Removing each Circuit Board

❺ Remove the three installation screws securing the terminals of the 1U-1776-1 or 1U-1775-1 board.
❻ Use radio pliers to grasp the PCB holder (shown by the arrow) securing the 1U-1776-1 or 1U-1775-1 board, then remove the 1U-1776-1 or 1U-1775-1 board.
❼ Remove the two installation screws from the 1U-1776-2 or 1U-1775-2 board, lift slightly up in the direction of the arrow, then pull forward and remove the 1U-1776-2 or 1U-1775-2 board.
❽ Remove the two installation screws from the 1U-1776-3 or 1U-1775-3 board.
❾ Unclasp the two installation hooks from the 1U-1776-3 or 1U-1775-3 board, lift the 1U-1776-3 or 1U-1775-3 board slightly up, then pull forward and remove.
❿ Remove the installation screw from the 1U-1776-5 or 1U-1775-5 board, then pull forward and remove the 1U-1776-5 or 1U-1775-5 board.



4. Removing the Front Panel

⓫ Use a screwdriver to press the four hooks on the front panel (shown by arrows), then pull the front panel forward and remove.

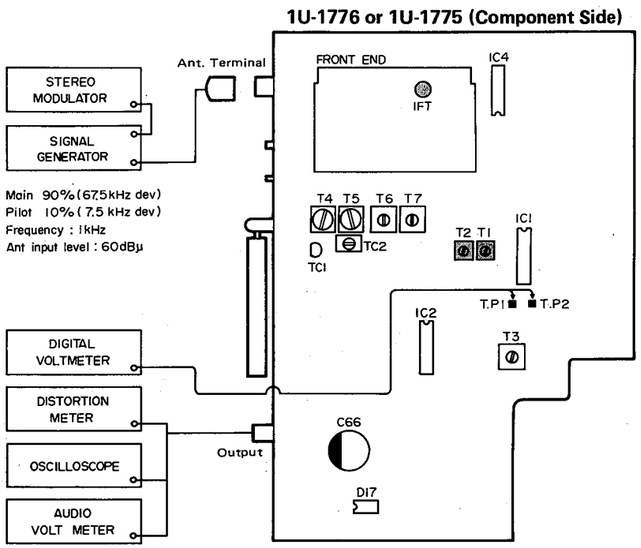


METHOD OF ADJUSTMENT

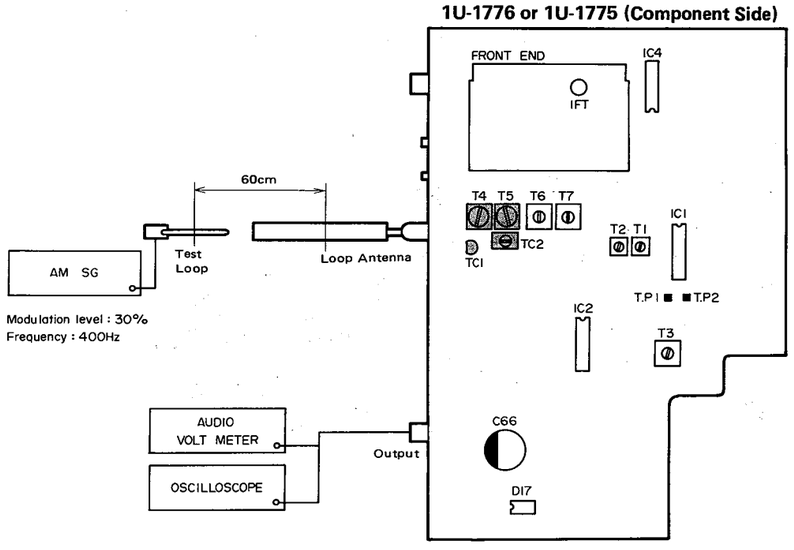
CONNECTION DIAGRAM OF MEASURING INSTRUMENTS

When making adjustments, be sure the power supply is at the rated voltage and the room air is on normal conditions with respect to temperature and humidity.

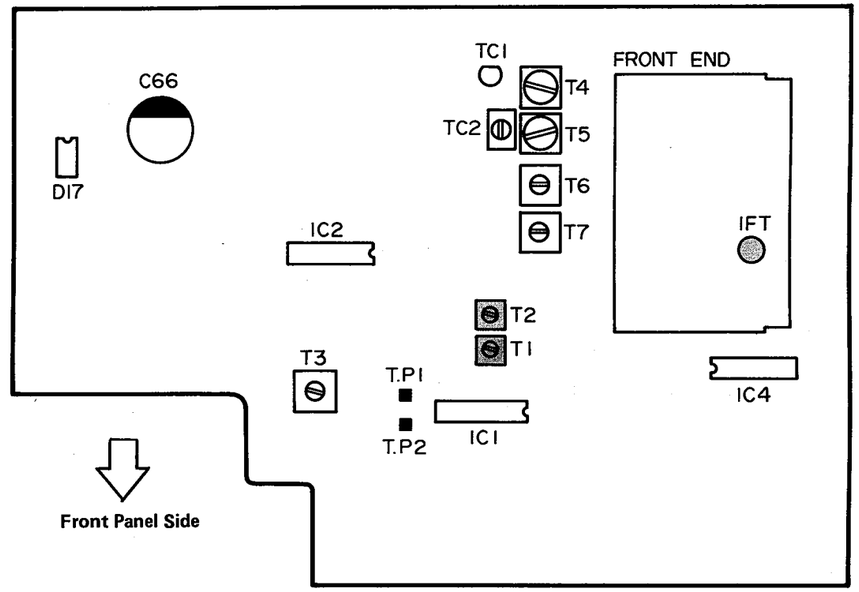
- **FM**



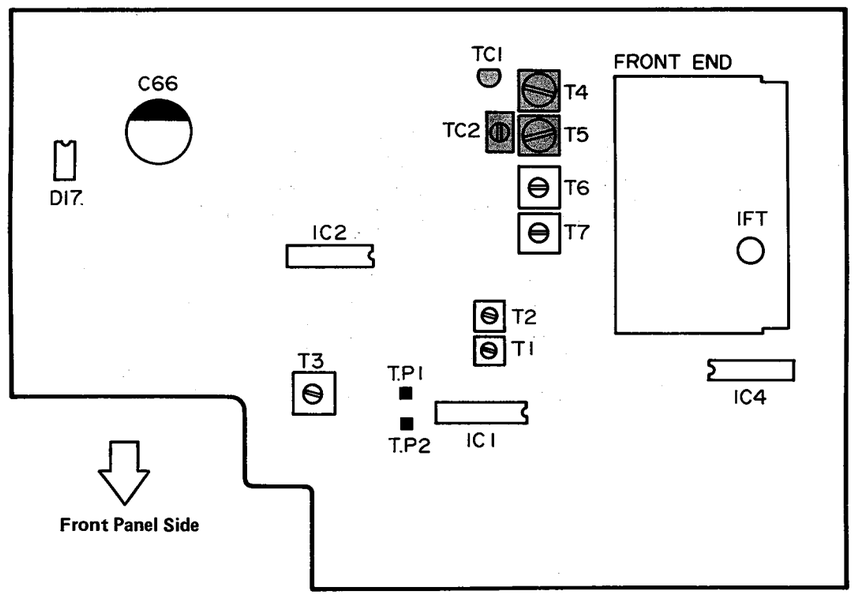
- **AM**



1U-1776 or 1U-1775B TUNER UNIT FM Alignment Points **(Component Side)**



1U-1776 or 1775B TUNER UNIT AM (MW, LW Alignment Points) **(Component Side)**



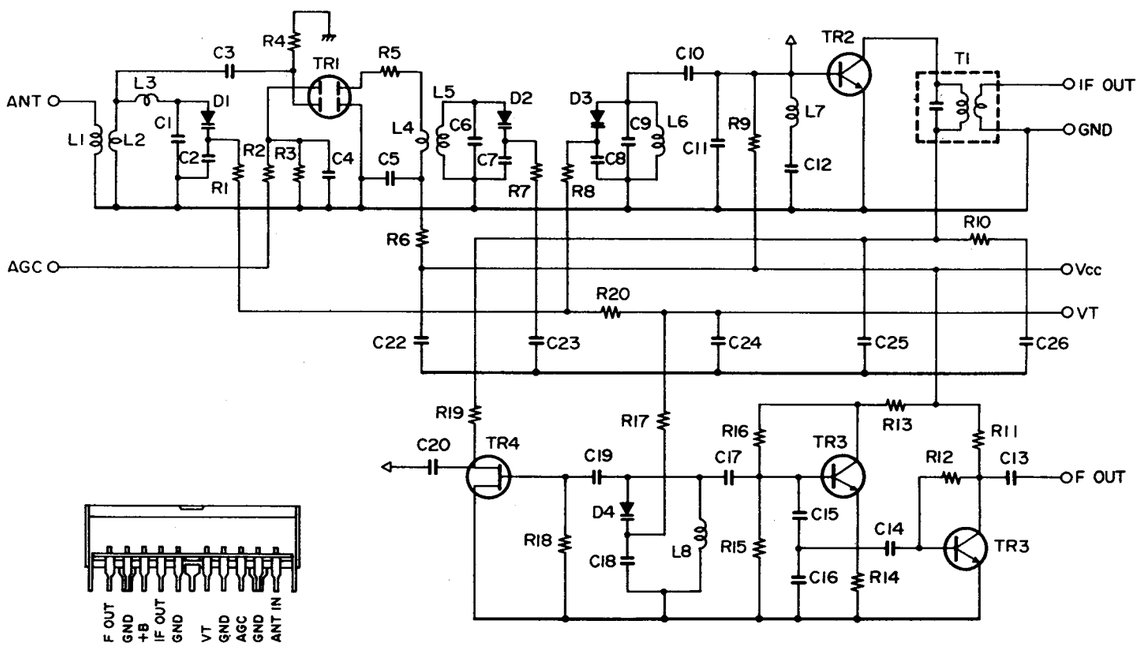
FM ALIGNMENT

Step	Alignment Item	Frequency	Input	Output		Adjustment		Remarks
				Type	Connect to	Points	Adjust to	
1	Tuning Center	98 MHz	FM SSG Mono	Digital Voltmeter	T.P. 1, 2	T1	±50MV	
2	Distortion (Mono)	98 mHz	FM SSG Mono	Distortion Meter	Output Terminal (L)	T2	Minimum Distortion	
3	Distortion (Stereo)	98 MHz	FM SSG Stereo (L)	Distortion Meter	Output Terminal (L)	IFT on Front End	Minimum Distortion	
4	Central & Distortion	Repeat 1 ~ 3 to obtain minimum distortion and turning center						

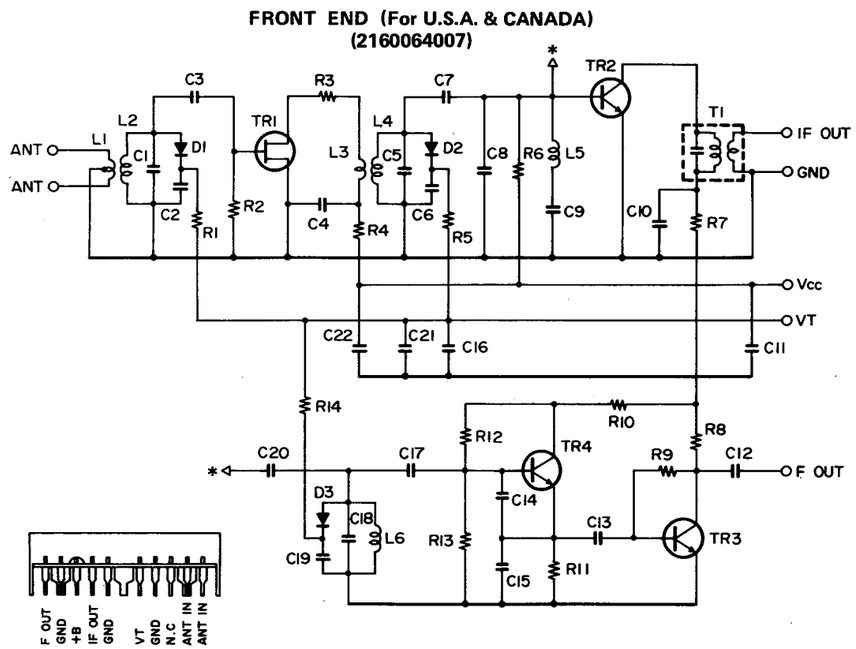
MW AND LW ALIGNMENT

1	Tracking Alignment of MW	600 kHz	AM SG	Audio Voltmeter	Output Terminal (L)	T5	Maximum Output	Input level is not over to work AGC
		1500 kHz				TC2	Maximum Output	
2	Tracking Alignment of LW	163 kHz	AM SG	Audio Voltmeter	Output Terminal (L)	T4	Maximum Output	Input level is not over to work AGC
		330 kHz				TC1	Maximum Output	

FRONT END (for Europe)
(2160065006)



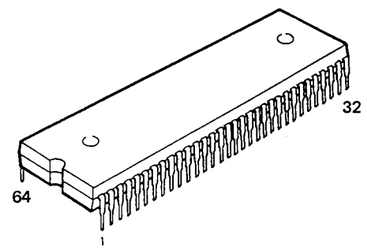
FRONT END (For U.S.A. & CANADA)
(2160064007)

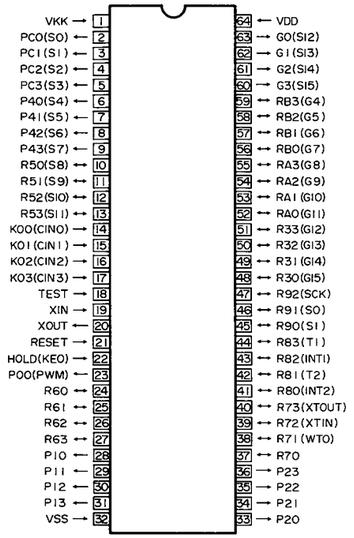


SEMICONDUCTORS

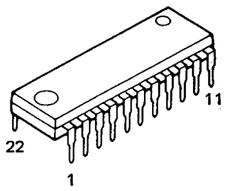
• IC's

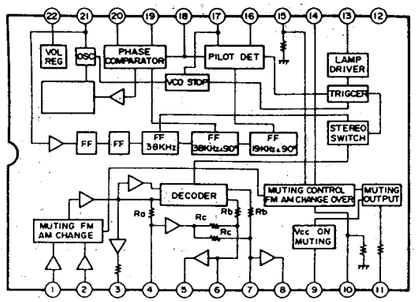
TMP47C670N-1284Z



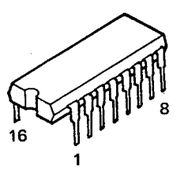


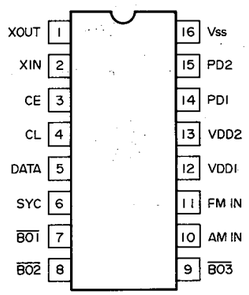
LA3401



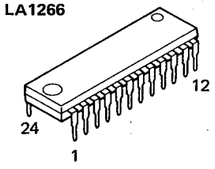


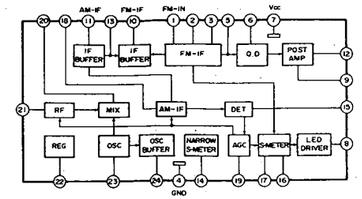
LM7001



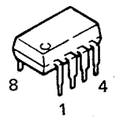


LA1266

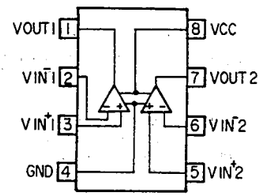


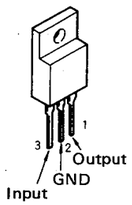


LA6358

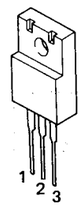


NJM78M12FA

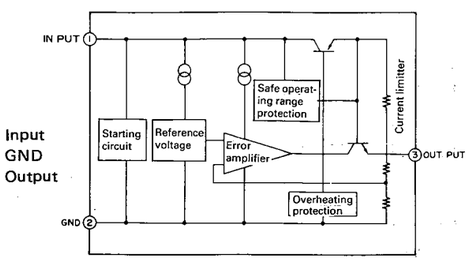




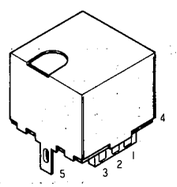
NJM78M06FA

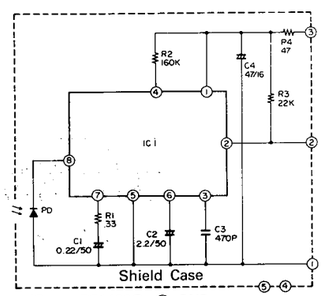


1: Input
2: GND
3: Output



QH3031HO
(Remocon Receiver)



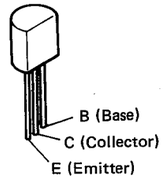


IC_1: μPC1490G
PD: Equivalent PD410P1

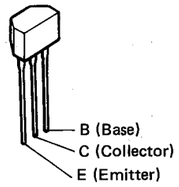
① GND
② V_{OUT}
③ V_{CC}
④ Case fin
⑤ Case fin

• TRANSISTORS

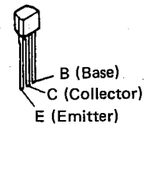
2SA1015 (GNY)
2SC2878 (A/B)
JC556 A/B
JC547 A/B



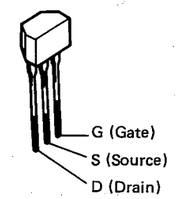
2SA1048 (Y/GR)
2SC2458 (BL)



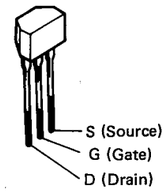
2SC2839 (E)



2SK161 (GR)

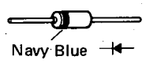


2SK365 (BL/GR)

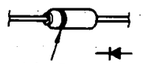


• DIODES

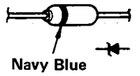
ISS270A



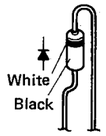
IS2076



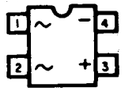
HZ6B-1
HZ11A-1
(Zener)



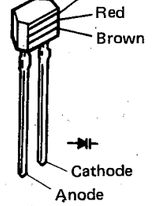
DSM1D2



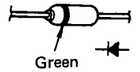
SIWB(A) 10



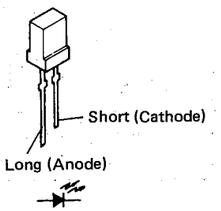
SVC321D2-SP
(Varactor)



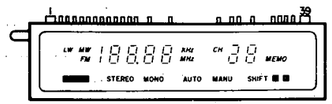
ISS110

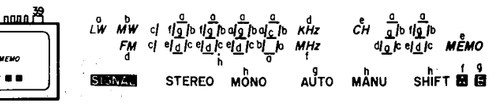


(LED)
SEL1321G (Green)



FLD (FIP10TM7)



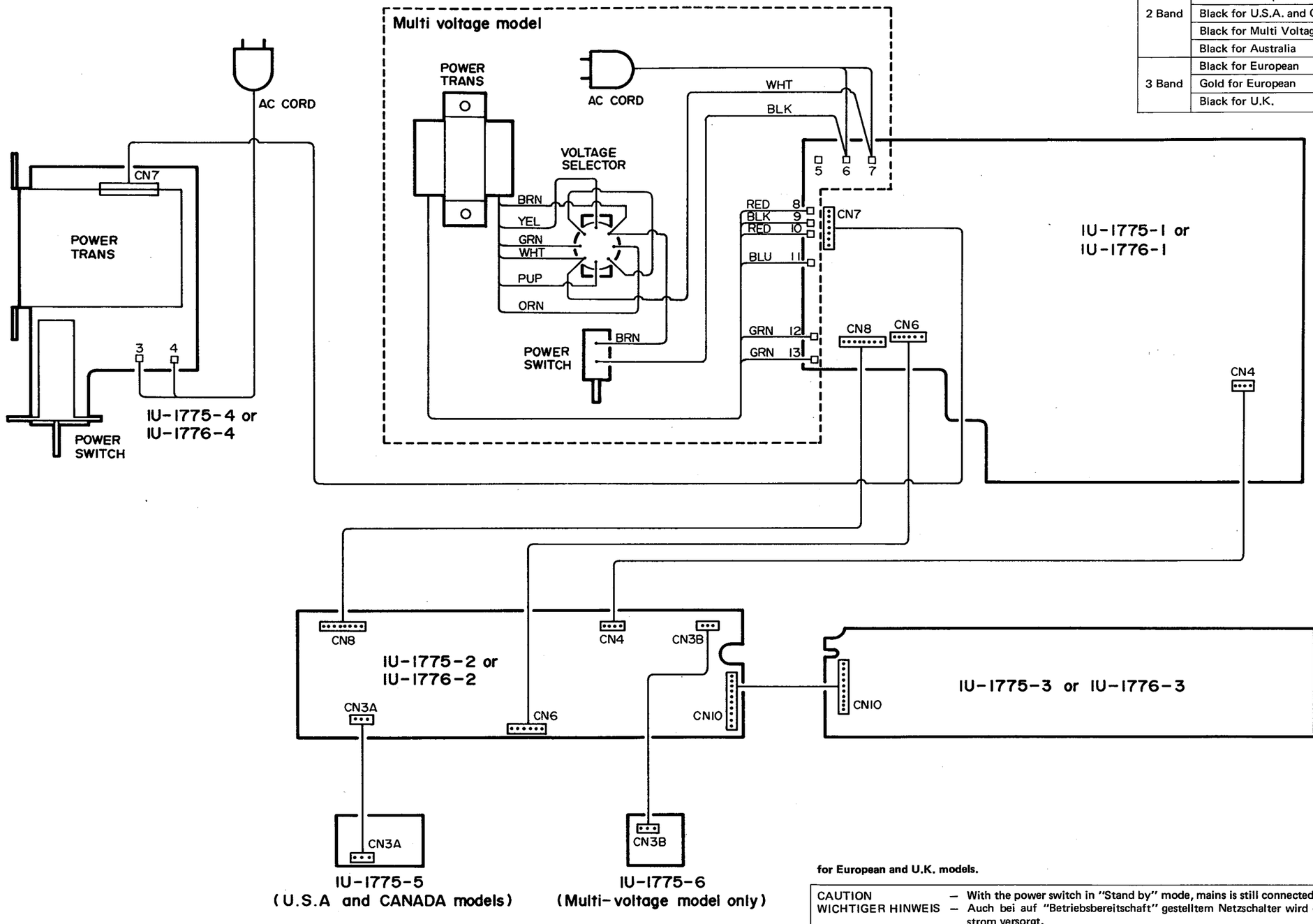


TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ELECTRODE	F	F	BG	P(h)	P(g)	P(f)	P(e)	P(d)	BG	P(c)	7G	P(b)	P(a)	6G	NP	5G	NP	NP	4G	NP
TERMINAL NO.	21	22	23	24	25	16	27	28	29	30	31	32	33	34	35	36	37	38	39	
ELECTRODE	NP	NP	NP	NP	NP	4G	NP	P (Z)	3G	NP	2G	NP	NP	P (Z)	1G	P (Stere)	P (Signa)	F	F	

Notes F: Filament NP: No Pin
G: Grid
P: Anode

WIRING DIAGRAM

	Model Name	Tuner Unit No.
2 Band	Black for European	1U-1776
	Gold for European	1U-1776
	Black for U.S.A. and Canada	1U-1775B
	Black for Multi Voltage	1U-1775C
	Black for Australia	1U-1776
3 Band	Black for European	1U-1776B
	Gold for European	1U-1776B
	Black for U.K.	1U-1776C

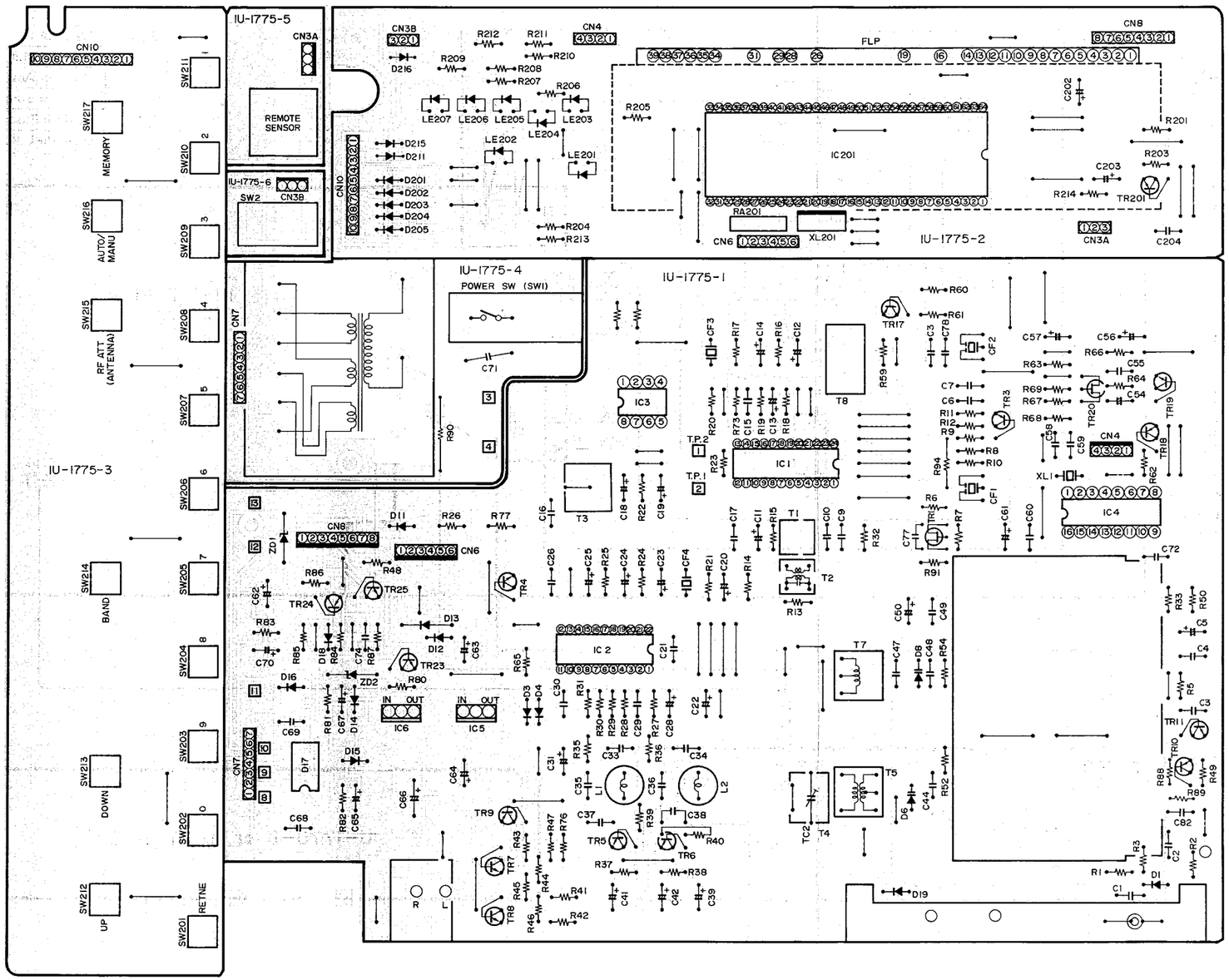


for European and U.K. models.

CAUTION	–	With the power switch in "Stand by" mode, mains is still connected.
WICHTIGER HINWEIS	–	Auch bei auf "Betriebsbereitschaft" gestelltem Netzschalter wird das Gerät noch mit strom versorgt.
PRECAUTION	–	L'interrupteur d'alimentation sur "stand by" (attente), l'alimentation n'est pas coupée.
OBS!	–	Nätsrömtillförseln kopplas inte ur när strömbrytaren står i beredskapläget (Stand by).

PRINTED WIRING BOARD (Pattern Side) 1U-1775, 1776 Tuner Unit (for 2 Band Model)

Area	Unit No.
European	1U-1776
U.S.A. and Canada	1U-1775B
Multi Voltage	1U-1775C
Australia	1U-1776



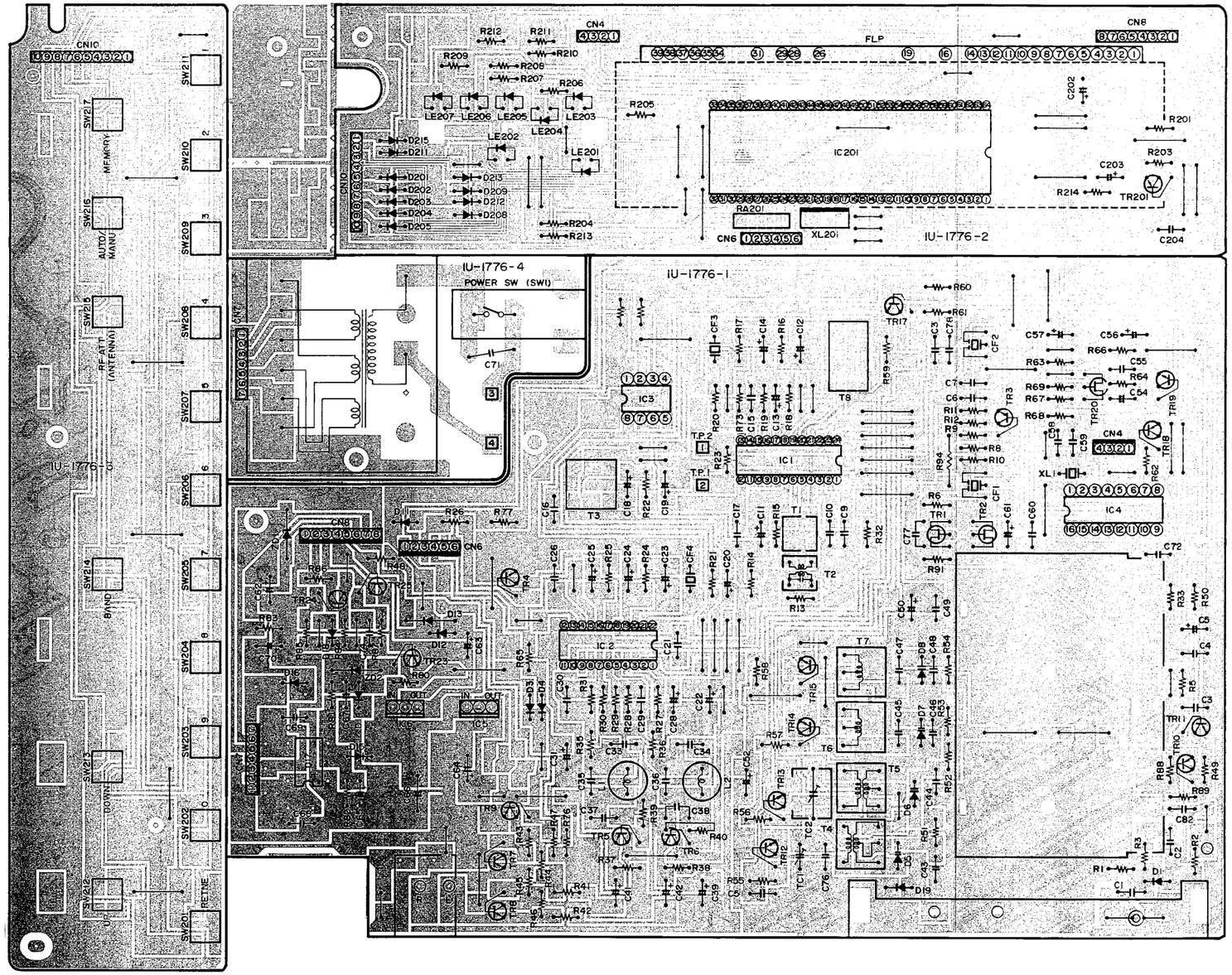
Note:

	Unit No.	TR1, 2	TR9,10,17,18,24	TR4,5,6,11,19,23,25,201	D211	C215	D216	R3	R6	R7	R19	R22	R23	R27	R28,31	R29,30	R38,40	R88	R89	R94	R214	C18	C20	C29,30	C77	T3	T7	CF1, 2	POWER TRANS	FRONT END	SLIDE (SW218)	REMOTE SENSOR	CN3A	CN3B	CN7
Europe	1U-1776	2SK161 (GR)	JC556 (A/B)	JC547 (A/B)	YES	YES	NONE	100Ω	330Ω	NONE	18k	1.2k	39k	43k	150k	200k	15k	10k	5.6k	100Ω	10k	22/16	22/16	330p	0.01	O	2311118003	SFT10.7MS$_2$	2335720008	2160065006	NONE	NONE	NONE	NONE	YES
USA & Canada	1U-1775B	NONE	2SA1048 (Y/GR)	2SC2458 (Y/GR)	NONE	JUMPER	NONE	180Ω	NONE	100Ω	20k	JUMPER	18k	51k	100k	120k	12k	—	NONE	NONE	—	10/16	JUMPER	750p	NONE	JUMPER	2314901000	SFE10.7MA8	2335724003	2160064007	NONE	YES	YES	NONE	YES
U.K. & Australia	1U-1776	2SK161 (GR)	JC556 (A/B)	JC547 (A/B)	YES	YES	NONE	100Ω	330Ω	NONE	18k	1.2k	39k	43k	150k	120k	15k	10k	5.6k	100Ω	10k	22/16	22/16	330p	0.01	O	2311118003	SFT10.7MS$_2$	233572008	2160065006	NONE	NONE	NONE	NONE	YES
Multi-Voltage	1U-1775C	NONE	2SA1048 (Y/GR)	2SC2458 (Y/GR)	NONE	YES	YES	180Ω	NONE	100Ω	18k	JUMPER	33k	51k	100k	120k	12k	—	NONE	NONE	—	10/16	JUMPER	510p	NONE	JUMPER	2314901000	SFE10.7MA8	NONE	2160064007	2124293005	YES	YES	YES	NONE

Other
- 1. Europe TR4, 5, 6, 11, 19, 23, 25, 201 2SC2458 (Y/GR) or JC547 (A/B)
  TR9, 10, 17, 18, 24 2SA1048 (Y/GR) or 556 (A/B)
- 2. U.S.A. Canada TR4, 5, 6, 11, 19, 23, 25, 201 2SC2458 (Y/GR)
  & Multi Voltage TR9, 10, 17, 18, 24 2SA1048 (Y/GR)
- D211, 215, 216 : 1SS270A

1U-1776 Tuner Unit (for 3 Band Model)

Area	Unit No.
Europe	1U-1776B
U.K.	1U-1776C

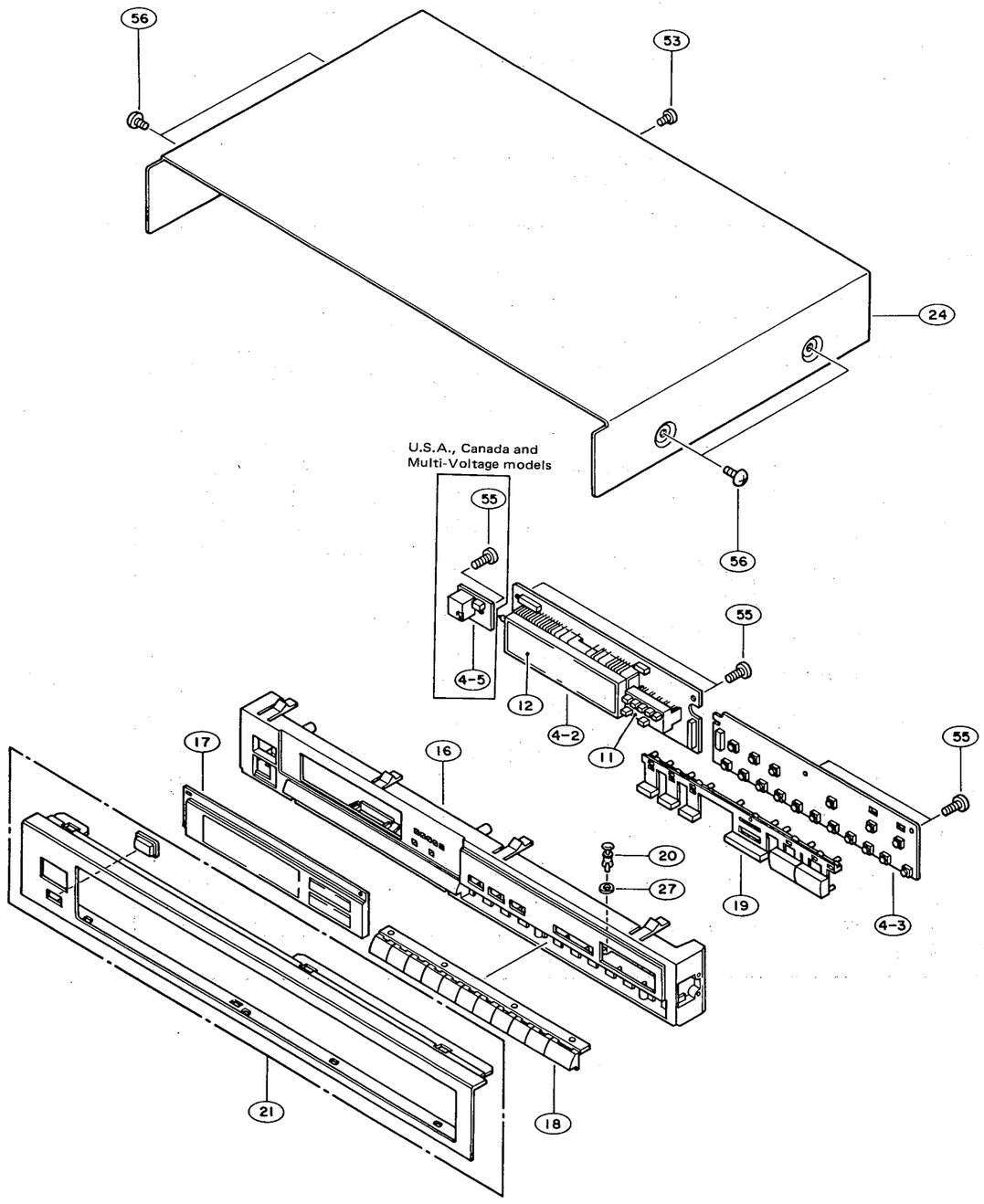


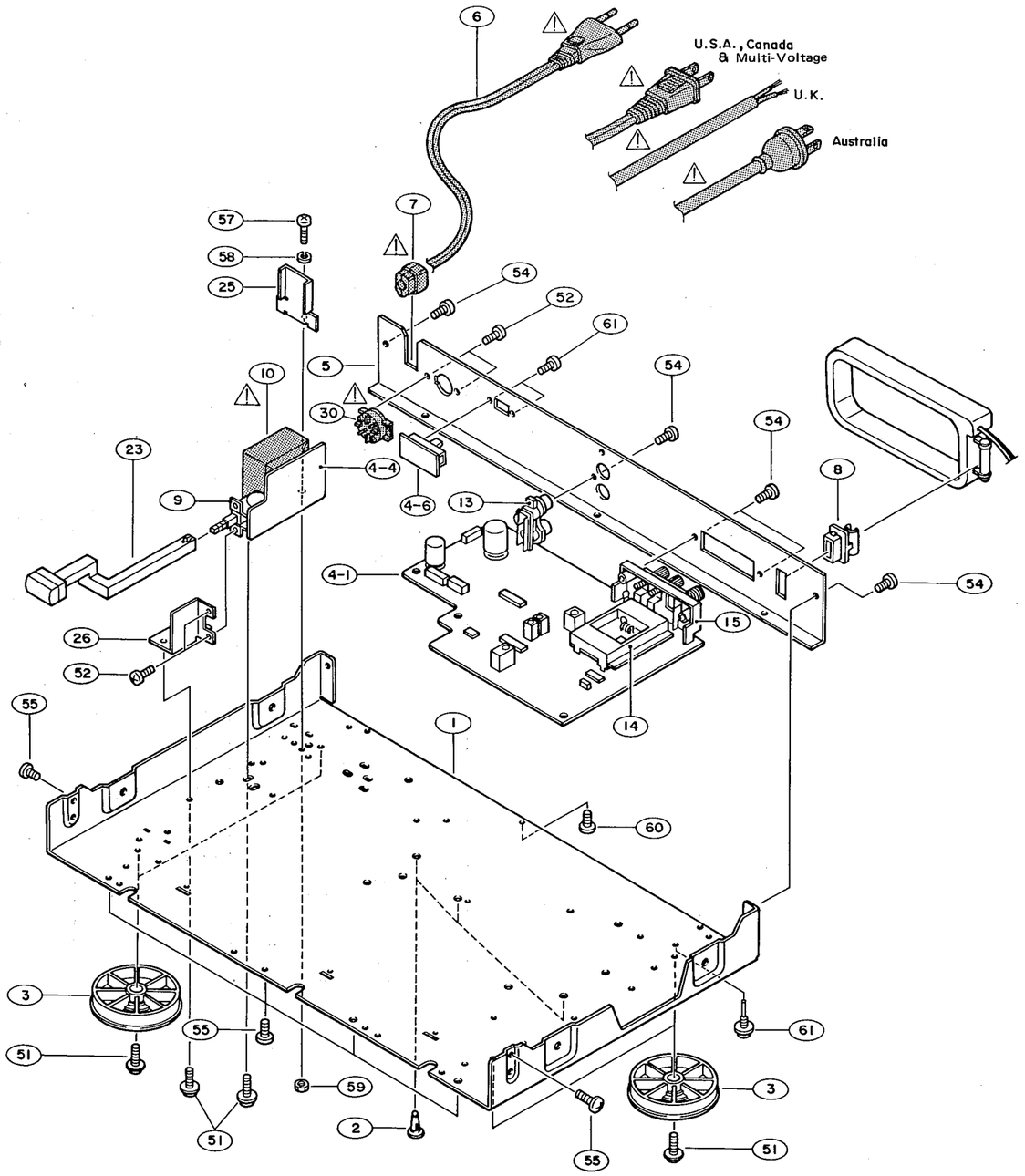
EXPLODED VIEW OF CHASSIS AND CABINET

1 2 3 4 5 6 7 8

A B C D E

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.





EXPLODED VIEW OF PARTS LIST

Note: See addendum list (Underlist) for the parts will asterisk(*) on the Ref. No. and the other parts not included in the list.

2 Band Black Version Parts List for Europe Model

Ref. No.	Part No.	Part Name	Remarks	Q'ty
◉ 1	411 0752 503	Main Chassis		1
2	412 1929 003	P.C.B Holder		3
3	104 0142 228	Insulator Ass'y		4
◉ 4	1U- 1776	Tuner Unit Ass'y		1S
4-1	1U- 1776 -1	Tuner Unit Ass'y		—
4-2	1U- 1776 -2	Display Unit		—
4-3	1U- 1776 -3	Switch Unit		—
4-4	1U- 1776 -4	Trans Unit		—
◉ 5	105 0818 018	Back Panel		1
⚠ 6	206 2063 009	AC Cord		1
⚠ 7	445 0056 008	Cord Bush		1
8	146 0494 006	Antenna Holder		1
9	212 0286 003	Power Switch	SW001	1
⚠ 10	233 5720 008	Power Trans		1
11	146 1019 008	LED Holder		1
12	393 4043 004	FIP10TM7	FLD	1
13	205 0274 004	2P Connector Base		1
14	216 0065 006	Front End		1
15	205 0433 007	3P Ant.Terminal (DIN)		1
* 16	146 1018 216	Inner Panel		1
17	143 0601 010	Window		1
* 18	113 1164 102	Push Knob	(Preset)	1
* 19	113 1165 101	Push Knob	(Tuning)	1
20	477 0096 007	Push Rivet		4
* 21	144 1816 014	Front Panel		1
22	—	—		1
* 23	113 1167 109	Power Knob Ass'y	(Power)	1
* 24	102 0122 271	Top Cover		1
25	412 2790 003	Support Bracket		1
26	412 2789 001	SW.Bracket		1
27	415 0501 002	Washer		1
SCREWS				
51	473 8007 009	Cup Screw 3X12		6
52	473 7002 021	Tapping Screw (S) 3X8	Black	2
53	473 7015 018	Tapping Screw (S) 3X8		1
54	477 0064 107	Fixing Screw		5
55	473 7508 017	Tapping Screw (P) 3X10	Black	11
* 56	477 0263 005	3P Swelling Screw		4
57	473 8016 003	Tapping Screw (S) 3X8		1
58	475 2003 005	Spring Washer 3		1
59	475 6006 008	Nut 3		1
60	473 7002 034	Tapping Screw (S) 3X6		1
61	477 0276 018	Earth Screw		1
PACKING & ACCESSORIES (not included EXPLODED VIEW)				
101	GEN 0256	Envelope Sub Ass'y		1S
101-1	505 8006 019	Envelope		1
101-2	511 1773 001	Inst. Manual		1
101-3	203 2223 002	2P Pin Cord		1
101-4	231 1060 009	Loop Antenna		1
101-5	529 0072 005	FM Ant.Adaptor		1
102	505 0075 006	Cabinet Cover	(750X350)	1
103	505 0100 010	Stylen Paper		1
104	503 0762 106	Cushion		2
* 105	501 1326 008	Carton Case		1
106	513 1389 006	Control Card Base		1
107	513 1349 004	Thermal Carbon Film		1

2 Band Gold Version Parts List for Europe Model (Same as Black Version * marks (Upper p/list) except the followings.)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
16	146 1018 229	Inner Panel		1
18	113 1146 128	Push Knob	(Preset)	1
19	113 1165 127	Push Knob	(Tuning)	1
21	144 1816 056	Front Panel		1
23	113 1167 112	Power Knob Ass'y	(Power)	1
24	102 0122 284	Top Cover		1
SCREW				
56	477 0263 018	3P Swelling Screw		4
PACKIN & ACCESSORIES				
105	501 1326 011	Carton Case		1
110	513 9111 001	Color Label (Gold)	Add	2

ADDENDUM LIST

Ref. No.	Part Name & Description	Part No.			
		U.S.A. and Canada	Australia	Multi Voltage	
◉ 4	Tuner Unit Ass'y	1U-1775B	1U-1776	1U-1775C	
4-1	Tuner Unit	1U-1775B-1	1U-1776-1	1U-1775C-1	
4-2	Display Unit	1U-1775B-2	1U-1776-2	1U-1775C-2	
4-3	Switch Unit	1U-1775B-3	1U-1776-3	1U-1775C-3	
4-4	Trans Unit	1U-1775B-4	1U-1776-4	1U-1775C-4	
4-5	Remocon Unit	1U-1775B-5	—	1U-1775C-5	
4-6	FQ.Switch Unit	—	—	1U-1775C-6	
◉ 5	Back Panel	105 0818 021	105 0818 076	105 0818 089	
⚠ 6	AC Cord	206 2060 002	206 2025 005	200 6031 026	
⚠ 7	Cord Bush	445 0056 008	445 0056 008	445 0056 008	
9	Power Switch	212 0286 003	212 0286 003	212 0286 003	
⚠ 10	Power Trans	233 5724 004	233 5748 006	233 5752 005	
14	Front End	216 0064 007	216 0065 006	216 0064 007	
15	(3P) Ant. Terminal	205 0433 010	205 0433 007	205 0433 010	
16	Inner Panel	146 1018 203	146 1018 216	146 1018 203	
17	Window	143 0601 023	143 0601 010	143 0601 007	
18	Push Knob (Preset)	113 1164 102	113 1164 102	113 1164 102	
19	Push Knob (Tuning)	113 1165 101	113 1165 101	113 1165 101	
21	Front Panel Ass'y	144 1818 025	144 1816 014	146 1818 069	
21	Front Panel	—	—	—	
⚠ 30	Voltage Sel. Switch	—	—	212 0186 006	
31	Preset Label	—	—	515 8030 008	
SCREWS					
52	Tapping Screw (S) 3X8	473 7002 021 (2)	4737002021 (2)	473 7002 021 (4)	
71		—	—	471 3201 024 (2)	
PACKING & ACCESSORIES (not included EXPLODED VIEW)					
101	Envelope Sub Ass'y	GEN 0292	GEN 0256	GEN 0256	
101-2	Inst. Manual	511 1774 000	511 1773 001	511 1773 001	
101-6	FM Ant. Ass'y	395 0005 204	—	—	
103	Stylen Paper	—	505 0100 010	505 0100 010	
101-7	Remote Controller(RC-114)	—	—	499 0124 005	
110	DAI Warranty Home/DCI Warranty	515 0418 204/515 0388 004	—	—	

3 Band Black Version Parts List for Europe Model

Ref. No.	Part No.	Part Name	Remarks	Q'ty
◉ 1	411 0752 503	Main Chassis		1
2	412 1929 003	P.C.B Holder		3
3	104 0142 228	Insulator Ass'y		4
◉ 4	1U- 1776	Tuner Unit Ass'y		1S
4-1	1U- 1776 B-1	Tuner Unit Ass'y		—
4-2	1U- 1776 B-2	Display Unit		—
4-3	1U- 1776 B-3	Switch Unit		—
4-4	1U- 1776 B-4	Trans Unit		—
◉ 5	105 0818 047	Back Panel		1
⚠ 6	206 2063 009	AC Cord		1
⚠ 7	445 0056 008	Cord Bush		1
8	146 0494 006	Antenna Holder		1
9	212 0286 003	Power Switch	SW001	1
⚠ 10	233 5720 008	Power Trans		1
11	146 1019 008	LED Holder		1
12	393 4043 004	FIP10TM7	FLD	1
13	205 0274 004	2P Connector Base		1
14	216 0065 006	Front End		1
15	205 0433 007	3P ANt.Terminal (DIN)		1
* 16	146 1018 216	Inner Panel		1
17	143 0601 010	Window		1
* 18	113 1164 102	Push Knob	(Preset)	1
* 19	113 1165 101	Push Knob	(Tuning)	1
20	477 0096 007	Push Rivet		3
* 21	144 1816 043	Front Panel		1
22	—	—		1
* 23	113 1167 109	Power Knob Ass'y	(Power)	1
* 24	102 0374 029	Top Cover		1
25	412 2790 003	Support Bracket		1
26	412 2789 001	SW.Bracket		1
27	415 0501 002	Washer		1
SCREWS				
51	473 8007 009	Cup Screw 3X12		6
52	473 7002 021	Tapping Screw (S) 3X8	Black	2
53	473 7015 018	Tapping Screw (S) 3X8		1
54	477 0064 107	Fixing Screw		5
55	473 7508 017	Tapping Screw (P) 3X10	Black	11
* 56	477 0263 005	3P Swelling Screw		4
57	473 8016 003	Tapping Screw (S) 3X8		1
58	475 2003 005	Spring Washer 3		1
59	475 6006 008	Nut 3		1
60	473 7002 034	Tapping Screw (S) 3X6		1
61	477 0276 018	Earth Screw		1
PACKING & ACCESSORIES (not included EXPLODED VIEW)				
101	GEN 0256	Envelope Sub Ass'y		1S
101-1	505 8006 019	Envelope		1
101-2	511 1773 001	Inst. Manual		1
101-3	203 2223 002	2P Pin Cord		1
101-4	231 1060 009	Loop Antenna		1
101-5	529 0072 005	FM Ant.Adaptor		1
102	505 0131 050	Cabinet Cover		1
103	505 0100 010	Stylen Paper		1
104	503 0762 106	Cushion		2
* 105	501 1326 024	Carton Case		1
106	513 1389 006	Control Card Base		1
107	513 1349 004	Thermal Carbon Film		1

3 Band Gold Version Parts List for Europe Model (Same as Black Version * marks (Upper p/list) except the followings.)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
16	146 1018 229	Inner Panel		1
18	113 1146 128	Push Knob	(Preset)	1
19	113 1165 127	Push Knob	(Tuning)	1
21	144 1816 072	Front Panel		1
23	113 1167 112	Power Knob Ass'y	(Power)	1
24	102 0122 284	Top Cover		1
SCREW				
56	477 0263 018	3P Swelling Screw		4
PACKIN & ACCESSORIES				
105	501 1326 011	Carton Case		1
110	513 9111 001	Color Label (Gold)	Add	2

ADDENDUM LIST

Ref. No.	Part Name & Description	Part No.			
		U.K.			
◉ 4	Tuner Unit Ass'y	1U-1776C			
4-1	Tuner Unit	1U-1776C-1			
4-2	Display Unit	1U-1776C-2			
4-3	Switch Unit	1U-1776C-3			
4-4	Trans Unit	1U-1776C-4			
4-5	Remocon Unit	—			
4-6	FQ.Switch Unit	—			
◉ 5	Back Panel	105 0818 050			
⚠ 6	AC Cord	206 2024 006			
⚠ 7	Cord Bush	445 0056 008			
9	Power Switch	212 0286 003			
⚠ 10	Power Trans	233 5748 006			
14	Front End	216 0065 006			
15	(3P) Ant. Terminal	205 0433 007			
16	Inner Panel	146 1018 216			
17	Window	143 0601 010			
18	Push Knob (Preset)	113 1164 102			
19	Push Knob (Tuning)	113 1165 101			
21	Front Panel	144 1816 043			
⚠ 30	Voltage Sel. Switch	—			
31	Preset Label	—			
SCREWS					
52	Tapping Screw (S) 3X8	473 7002 021(2)			
PACKING & ACCESSORIES (not included EXPLODED VIEW)					
101	Envelope Sub Ass'y	GEN 0256			
101-2	Inst. Manual	511 1773 001			
101-6	FM Ant. Ass'y	—			
103	Stylen Paper	505 0100 010			

2 Band Model

1U-1776 TUNER UNIT PARTS LIST for Europe and Australia

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS			
IC001	263 0438 008	LA1266	IC
IC002	263 0439 007	LA3401	IC
IC003	263 0237 005	LA6358	IC
IC004	262 0719 009	LM7001	IC
IC005	263 0571 004	NJM78M12FA	IC
IC006	263 0586 002	NJM78M06FA	IC
IC201	262 1134 007	TMP47C670N-1284	IC
TR001	275 0051 909	2SK161 (GR)	FET
TR003	273 0357 908	2SC2839 (E)	Transistor
TR004～006	273 0381 903	JC547A/B AMMO	Transistor
TR007,008	273 0253 015	2SC2878 (A/B)	Transistor
TR009,010	271 0233 903	JC556A/B AMMO	Transistor
TR011	273 0381 903	JC547A/B AMMO	Transistor
TR017,018	271 0233 903	JC556A/B AMMO	Transistor
TR019	273 0381 903	JC547A/B AMMO	Transistor
TR020	275 0053 907	2SK365 (BL/GR)	FET
TR023	273 0381 903	JC547A/B AMMO	Transistor
TR024	271 0233 903	JC556A/B AMMO	Transistor
TR025	273 0381 903	JC547A/B AMMO	Transistor
TR201	273 0381 903	JC547A/B AMMO	Transistor
D001	276 0546 909	1SS110	Diode
D003	276 0049 008	1S2760	Diode
D004	276 0432 000	1SS270A	Diode
D006	276 0302 004	SVC321D2-SP	Varactor (Replase in pairs)
D008	276 0302 004	SVC321D2-SP	Varactor (Replase in pairs)
D011,012	276 0432 000	1SS270A	Diode
D013	276 0049 008	1S2076	Diode
D014	276 0432 000	1SS270A	Diode
D015,016	276 0548 910	DSM1D2	Diode Type-3
D017	276 0405 901	S1WB (A) 10	Diode
D018,019	276 0432 000	1SS270A	Diode
D201～205	276 0432 000	1SS270A	Diode
D211	276 0432 000	1SS270A	Diode
D215	276 0432 000	1SS270A	Diode
D301	276 0432 000	1SS270A	Diode
ZD001,002	276 0218 910	HZ9A-2	Zener
LE201～207	393 9261 027	SEL1321G (D2/3)	LED
RESISTORS (not included Carbon Film ±5%,1/4W Type)			
RA201	246 2053 001	RK99==103JP5	Array 10kΩ×5
CAPACITORS			
(Ceramic Capacitor)			
C001,002	253 1004 007	CK45B1H102K	100pF/50V
C003,004	253 1024 003	CK45F1H103Z	0.01μF/50V
C006～010	253 1024 003	CK45F1H103Z	0.01μF/50V
C015	253 1182 000	CK45F==473Z	0.047μF/25VD=3
C017	253 1055 072	CK45B1H121K	120pF/50V
C026	253 1024 003	CK45F1H103Z	0.01μF/50V
C029,030	253 3639 001	CC45SL1H331J	330pF/50V
C033,034	253 1061 008	CK45B1H272K	2700pF/50V
C035,036	253 1060 009	CK45B1H182K	1800pF/50V
C037,038	253 1059 007	CK45B1H122K	1200pF/50V
C044	253 1024 003	CK45F1H103Z	0.01μF/50V
C048	253 3607 004	CC45SL1H150J	15pF/50V
C049	253 1024 003	CK45F1H103Z	0.01μF/50V
C055	253 1025 002	CK45F1H223Z	0.022μF/50V
C058,059	253 3608 003	CC45SL1H160J	16pF/50V
C060	253 1024 003	CK45F1H103Z	0.01μF/50V
⚠C068,069	253 1024 003	CK45F1H103Z	0.01μF/50V

Ref. No.	Part No.	Part Name	Remarks
C071	253 8014 003	CK45F2GAC103M	0.01μF/400V (AC)
C072,073	253 1024 003	CK45F1H103Z	0.01μF/50V
C075	253 1024 003	CK45F1H103Z	0.01μF/50V
C077	253 1024 003	CK45F1H103Z	0.01μF/50V
C078	253 3627 000	CC45SL1H101J	100pF/50V
C082,083	253 1024 003	CK45F1H103Z	0.01μF/50V
C084	253 1024 003	CK45F1H103Z	0.01μF/50V
(Electrolytic Capacitor)			
C005	254 4254 006	CE04W1C100M	10μF/16V
C011	254 4254 035	CE04W1C470M	47μF/16V
C012	254 4258 002	CE04W1V4R7M	4.7μF/35V
C013	254 4254 006	CE04W1C100M	10μF/16V
C014	254 4260 061	CE04W1H3R3M	3.3μF/50V
C018	254 4254 019	CE04W1C220M	22μF/16V
C019	254 4260 045	CE04W1H010M	1μF/50V
C020	254 4254 019	CE04W1C220M	22μF/16V
C022	254 4254 035	CE04W1C470M	47μF/16V
C023	254 4260 045	CE04W1H010M	1μF/50V
C024	254 4260 016	CE04W1HR22M	0.22μF/50V
C025	254 4260 045	CE04W1H010M	1μF/50V
C028	254 4254 006	CE04W1C100M	10μF/16V
C031	254 4260 058	CE04W1H2R2M	2.2μF/50V
C039	254 4254 035	CE04W1C470M	47μF/16V
C041,042	254 4260 045	CE04W1H010M	1μF/50V
C050	254 4254 035	CE04W1C470M	47μF/16V
C054	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)
C056	254 4260 003	CE04W1H0R1M	0.1μF/50V
C057	254 4254 035	CE04W1C470M	47μF/16V
C061	254 4260 045	CE04W1H010M	1μF/50V
C063,064	254 4254 006	CE04W1C100M	10μF/16V
C065	254 4260 045	CE04W1H010M	1μF/50V
C066	254 4256 790	CE04W1E222MC	2200μF/25V
C067	254 4260 045	CE04W1H010M	1μF/50V
C070	254 4258 057	CE04W1V101M	100μF/35V
C202	254 4250 055	CE04W0J471M	470μF/6.3V
C203	254 4195 039	CE04W1V220M	22μF/35V
C301	254 4258 002	CE04W1V4R7M	4.7μF/35V
(Plastic Film Capacitor)			
C047	255 4201 942	CQ93P1H391J	390pF/50V
(Metalized Capacitor)			
C016	256 1034 047	CF93A1H563J	0.056μF/50V
C021	256 1034 034	CF93A1H473J	0.047μF/50V
C074	256 1034 034	CF93A1H473J	0.047μF/50V
(Other Capacitor)			
C062	259 0007 702	SB CAP==822=C	8200μF
TC002	213 0022 008	Trimmer Condencer	

E.U. PARTS				Q'ty
L001,002	235 0020 097	Inductor	39mH	2
SW001	212 0286 003	Power Switch		1
S201～217	212 4388 004	Tact Switch		17
XL001	399 0075 003	X'tal (7.2MHz)		1
XL201	399 0034 002	OSC Element (CST4.00MG)		1
	393 4043 004	FIP10TM7	FLD	1
	205 0274 004	2P Connector Base		1
	216 0065 006	Front End		1
	205 0433 007	3P Ant.Terminal (DIN)		1

COIL TRANS				Q'ty
T001	231 2076 005	FM IF DFT Trans (P)		1
T002	231 2077 004	FM IF DFT Trans (S)		1
T003	232 0096 006	Anti Birdie FIlter		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
T005	231 1911 103	MW Ant.Trans		1
T007	231 1118 003	MW OSC Coil		1
T008	231 1132 005	AM IFT	SFL450J3	1
CF001,002	261 0064 007	Cermic Filter	SFT10.7MS2	2
CF003	261 0101 009	AM Cermic Filter	BFU450C4	1
CF004	261 0103 007	AM Cermic Filter	CSB456F11	1
⚠	233 5720 008	Power Trans		1
OTHER PARTS				Q'ty
◉	—	(P.W. Board)		1
	146 1019 008	LED Holder		1
	412 2268 205	FLD Bracket		1
	205 0343 045	4P Connector Base	KR-PH	1
	205 0343 061	6P Connector Base	KR-PH	2
	205 0343 074	7P Connector Base	KR-PH	1
	205 0343 087	8P Connector Base	KR-PH	1
	473 7002 021	Tapping Screw (S) 3×8	BLACK	1
	415 0299 000	Condenser Cover		1
	417 0043 100	Radiator		1
	204 2341 000	10P SAN-SAN Con. Cord		1
	204 2243 043	7P KR-DA Con. Cord		1
	203 6215 058	4P KR-DA Con. Cord		1
	204 0265 007	6P KR-DA Con. Cord		1
	204 2244 071	8P KR-DA Con. Cord		1

1U-1775B TUNER UNIT PARTS LIST for U.S.A. and Canada

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS			
IC001	263 0438 008	LA1266	IC
IC002	263 0439 007	LA3401	IC
IC003	263 0237 005	LA6358	IC
IC004	262 0719 009	LM7001	IC
IC005	263 0571 004	NJM78M12FA	IC
IC006	263 0586 002	NJM78M06FA	IC
IC201	262 1134 007	TMP47C670N-1284	IC
TR003	273 0357 908	2SC2839 (E)	Transistor
TR004～006	273 0222 907	2SC2458 (Y/GR)	Transistor
TR007,008	273 0253 015	2SC2878 (A/B)	Transistor
TR009,010	271 1094 903	25A1048 (Y/GR)	Transistor
TR011	273 0222 907	2SC2458 (Y/GR)	Transistor
TR017,018	271 0194 903	2SA1048 (Y/GR)	Transistor
TR019	273 0222 907	2SC2458 (Y/GR)	Transistor
TR020	275 0053 907	2SK365 (BL/GR)	FET
TR021	271 0102 034	2SA1015 (GR/Y)	Transistor
TR022,023	273 0222 907	2SC2458 (Y/GR)	Transistor
TR024	271 0194 903	2SA1048 (Y/GR)	Transistor
TR025	273 0222 907	2SC2458 (Y/GR)	Transistor
TR201	273 0222 907	2SC2458 (Y/GR)	Transistor
D001	276 0546 909	1SS110	Diode
D003	276 0049 008	1S2076	Diode
D004	276 0432 000	1SS270A	Diode
D006	276 0302 004	SVC321D2-SP	Varactor (Replase in pairs)
D008	276 0302 004	SVC321D2-SP	Varactor (Replase in pairs)
D011,012	276 0432 000	1SS270A	Diode
D013	276 0049 008	1S2076	Diode
D014	276 0432 000	1SS270A	Diode
D015,016	276 0548 910	DSM1D2	Diode Type-3
D017	276 0405 901	S1WB (A) 10	Diode
D018,019	276 0432 000	1SS270A	Diode
D201～205	276 0432 000	1SS270A	Diode
D301	276 0432 000	1SS270A	Diode
ZD001,002	276 0218 910	HZ9A-2	Zener
LE201～207	393 9261 027	SEL1321G (D2/3)	LED
RESISTORS (not included Carbon Film ±5%,1/4W Type)			
⚠R	242 0073 000	RC05GF2H225K	2.2MΩ 1/2W
RA201	246 2053 004	RK99==103JP5	Array 10KΩ×5
CAPACITORS			
(Ceramic Capacitor)			
C001,002	253 1004 007	CK45B1H102K	1000pF/50V
C003,004	253 1024 003	CK45F1H103Z	0.01μF/50V
C006～010	253 1024 003	CK45F1H103Z	0.01μF/50V
C015	253 1182 903	CK45F==473Z	0.047μF/25V D=3
C017	253 1055 072	CK45B1H121K	120pF/50V
C026	253 1024 003	CK45F1H103Z	0.01μF/50V
C029,030	253 4351 003	CC45SL1H751J	750pF/50V
C033,034	253 1061 008	CK45B1H272K	2700pF/50V
C035,036	253 1060 009	CK45B1H182K	1800pF/50V
C037,038	253 1059 007	CK45B1H122K	1200pF/50V
C044	253 1024 003	CK45F1H103Z	0.01μF/50V
C048	253 3607 004	CC45SL1H150J	15pF/50V
C049	253 1024 003	CK45F1H103Z	0.01μF/50V
C055	253 1025 002	CK45F1H223Z	0.022μF/50V
C058,059	253 3608 003	CC45SL1H160J	16pF/50V
C060	253 1024 003	CK45F1H103Z	0.01μF/50V
C068,069	253 1024 003	CK45F1H103Z	0.01μF/50V
⚠C071	253 8014 003	CK45F2GAC103M	0.01μF/400V (AC)
C072,073	253 1024 003	CK45F1H103Z	0.01μF/50V

Ref. No.	Part No.	Part Name	Remarks
C078	253 3627 000	CC45SL1H101J	100pF/50V
C082	253 1024 003	CK45F1H103Z	0.01μF/50V
C084	253 1024 003	CK45F1H103Z	0.01μF/50V
C204	253 1004 007	CK45B1H102K	1000pF/50V
(Electrolytic Capacitor)			
C005	254 4254 006	CE04W1C100M	10μF/16V
C011	254 4254 035	CE04W1C470M	47μF/16V
C012	254 4258 002	CE04W1V4R7M	4.7μF/35V
C013	254 4254 006	CE04W1C100M	10μF/16V
C014	254 4260 061	CE04W1H3R3M	3.3μF/50V
C018	254 4254 006	CE04W1C100M	10μF/16V
C019	254 4260 045	CE04W1H010M	1μF/50V
C022	254 4254 035	CE04W1C470M	47μF/16V
C023	254 4260 045	CE04W1H010M	1μF/50V
C024	254 4260 016	CE04W1HR22M	0.22μF/50V
C025	254 4260 045	CE04W1H010M	1μF/50V
C028	254 4254 006	CE04W1C100M	10μF/16V
C031	254 4260 059	CE04W1H2R2M	2.2μF/50V
C039	254 4254 035	CE04W1C470M	47μF/16V
C041,042	254 4260 045	CE04W1H010M	1μF/50V
C050	254 4254 035	CE04W1C470M	47μF/16V
C054	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)
C056	254 4260 003	CE04W1H0R1M	0.1μF/50V
C057	254 4254 035	CE04W1C470M	47μF/16V
C061	254 4260 045	CE04W1H010M	1μF/50V
C063,064	254 4254 006	CE04W1C100M	10μF/16V
C065	254 4260 045	CE04W1H010M	1μF/50V
C066	254 4256 790	CE04W1E222MC	2200μF/25V
C067	254 4260 045	CE04W1H010M	1μF/50V
C070	254 4258 057	CE04W1V101M	100μF/35V
C074	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)
C202	254 4250 055	CE04W0J471M	470μF/6.3V
C203	254 4195 039	CE04W1V220M	22μF/35V
C204	254 4260 045	CE04W1H010M	22μF/35V
C301	254 4258 002	CE04W1V4R7M	4.7μF/35V
(Plastic Film Capacitor)			
C047	255 4201 942	CQ93P1H391J	390pF/50V
(Metalized Capacitor)			
C016	256 1034 047	CF93A1H563J	0.056μF/50V
C021	256 1034 034	CF93A1H473J	0.047μF/50V
C074	256 1034 034	CF93A1H473J	0.047μF/50V
(Other Capacitor)			
C062	259 0007 702	SB CAP==822=C	8200μF
TC002	213 0022 008	Trimmer Condencer	
E.U. PARTS			Q'ty
L001,002	235 0020 097	Inductor	39mH 2
SW001	212 0286 003	Power Switch	1
S201～217	212 4388 004	Tact Switch	17
XL001	399 0075 003	X'tal (7.2MHz)	1
XL201	399 0034 002	OSC Element (CST4.00MG)	1
	393 4043 004	FIP10TM7	FLD 1
	205 0274 004	2P Connector Base	1
	499 0088 002	QH3031H0	Remocon Receiver 1
	216 0064 007	Front End	1
	205 0433 010	Ant.Terminal (F)	1
COIL TRANS			Q'ty
T001	231 2076 005	FM IF DFT Trans (P)	1
T002	231 2077 004	FM IF DFT Trans (S)	1
T005	231 1911 103	MW Ant.Trans	1
T007	231 4901 000	MW OSC Coil	1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
T008	231 1132 005	AM IFT	SFL450J3	1
CF001,002	261 0025 004	Cermic Filter		2
CF003	261 0031 001	AM Cermic Filter	BFU450C4	1
CF004	261 0079 005	AM Cermic Filter	CSB456F11	1
⚠	233 5724 004	Power Trans		1
OTHER PARTS				Q'ty
◉	—	(P.W. Board)		1
	146 1019 008	LED Holder		1
	412 2268 205	FLD Bracket		1
	205 0343 032	3P Connector Base	KR-PH	1
	205 0343 045	4P Connector Base	KR-PH	1
	205 0343 061	6P Connector Base	KR-PH	2
	205 0343 074	7P Connector Base	KR-PH	1
	205 0343 087	8P Connector Base	KR-PH	1
	473 7002 021	Topping Screw (S) 3×8	BLACK	1
	417 0043 100	Radiator		1
	204 2341 000	10P SAN-SAN Con-Cord		1
	204 2243 043	7P KR-DA Con-Cord		1
	203 6215 058	4P KR-DA Con-Cord		1
	204 0265 007	6P KR-DA Con-Cord		1
	204 2244 071	8P KR-DA Con-Cord		1
	203 4456 068	3P KR-DA Con-Cord		1

1U-1775C TUNER UNIT PARTS LIST for Multi Voltage

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS			
IC001	263 0438 008	LA1266	IC
IC002	263 0439 007	LA3401	IC
IC003	263 0237 005	LA6358	IC
IC004	262 0719 009	LM7001	IC
IC005	263 0571 004	NJM78M12FA	IC
IC006	263 0586 002	NJM78M06FA	IC
IC201	262 1134 007	TMP47C670N-1284	IC
TR003	273 0357 908	2SC2839 (E)	Transistor
TR004～006	273 0222 907	2SC2458 (Y/GR)	Transistor
TR007,008	273 0253 015	2SC2878 (A/B)	Transistor
TR009,010	271 1094 903	25A1048 (Y/GR)	Transistor
TR011	273 0222 907	2SC2458 (Y/GR)	Transistor
TR017,018	271 0194 903	2SA1048 (Y/GR)	Transistor
TR019	273 0222 907	2SC2458 (Y/GR)	Transistor
TR020	275 0053 907	2SK365 (BL/GR)	FET
TR021	271 0102 034	2SA1015 (GR/Y)	Transistor
TR022,023	273 0222 907	2SC2458 (Y/GR)	Transistor
TR024	271 0194 903	2SA1048 (Y/GR)	Transistor
TR025	273 0222 907	2SC2458 (Y/GR)	Transistor
TR201	273 0222 907	2SC2458 (Y/GR)	Transistor
D001	276 0546 909	1SS110	Diode
D003	276 0049 008	1S2076	Diode
D004	276 0432 000	1SS270A	Diode
D006	276 0302 004	SVC321D2-SP	Varactor (Replase in pairs)
D008	276 0302 004	SVC321D2-SP	Varactor (Replase in pairs)
D011,012	276 0432 000	1SS270A	Diode
D013	276 0049 008	1S2076	Diode
D014	276 0432 000	1SS270A	Diode
D015,016	276 0548 910	DSM1D2	Diode Type-3
D017	276 0405 901	S1WB (A) 10	Diode
D018,019	276 0432 000	1SS270A	Diode
D201～205	276 0432 000	1SS270A	Diode
D301	276 0432 000	1SS270A	Diode
ZD001,002	276 0218 910	HZ9A-2	Zener
LE201～207	393 9261 027	SEL1321G (D2/3)	LED
RESISTORS (not included Carbon Film ±5%,1/4W Type)			
⚠R	242 0073 000	RC05GF2H225K	2.2MΩ1/2W
RA201	246 2053 004	RK99==103JP5	Array 10KΩ×5
CAPACITORS			
(Ceramic Capacitor)			
C001,002	253 1004 007	CK45B1H102K	1000pF/50V
C003,004	253 1024 003	CK45F1H103Z	0.01μF/50V
C006～010	253 1024 003	CK45F1H103Z	0.01μF/50V
C015	253 1182 903	CK45F==473Z	0.047μF/25V D=3
C017	253 1055 072	CK45B1H121K	120pF/50V
C026	253 1024 003	CK45F1H103Z	0.01μF/50V
C029,030	253 4351 003	CC45SL1H751J	750pF/50V
C033,034	253 1061 008	CK45B1H272K	2700pF/50V
C035,036	253 1060 009	CK45B1H182K	1800pF/50V
C037,038	253 1059 007	CK45B1H122K	1200pF/50V
C044	253 1024 003	CK45F1H103Z	0.01μF/50V
C048	253 3607 004	CC45SL1H150J	15pF/50V
C049	253 1024 003	CK45F1H103Z	0.01μF/50V
C055	253 1025 002	CK45F1H223Z	0.022μF/50V
C058,059	253 3608 003	CC45SL1H160J	16pF/50V
C060	253 1024 003	CK45F1H103Z	0.01μF/50V
C068,069	253 1024 003	CK45F1H103Z	0.01μF/50V
⚠C071	253 8014 003	CK45F2GAC103M	0.01μF/400V (AC)
C072,073	253 1024 003	CK45F1H103Z	0.01μF/50V

Ref. No.	Part No.	Part Name	Remarks	Q'ty
C078	253 3627 000	CC45SL1H101J	100pF/50V	
C082	253 1024 003	CK45F1H103Z	0.01μF/50V	
C084	253 1024 003	CK45F1H103Z	0.01μF/50V	
C204	253 1004 007	CK45B1H102K	1000pF/50V	
(Electrolytic Capacitor)				
C005	254 4254 006	CE04W1C100M	10μF/16V	
C011	254 4254 035	CE04W1C470M	47μF/16V	
C012	254 4258 002	CE04W1V4R7M	4.7μF/35V	
C013	254 4254 006	CE04W1C100M	10μF/16V	
C014	254 4260 061	CE04W1H3R3M	3.3μF/50V	
C018	254 4254 006	CE04W1C100M	10μF/16V	
C019	254 4260 045	CE04W1H010M	1μF/50V	
C022	254 4254 035	CE04W1C470M	47μF/16V	
C023	254 4260 045	CE04W1H010M	1μF/50V	
C024	254 4260 016	CE04W1HR22M	0.22μF/50V	
C025	254 4260 045	CE04W1H010M	1μF/50V	
C028	254 4254 006	CE04W1C100M	10μF/16V	
C031	254 4260 059	CE04W1H2R2M	2.2μF/50V	
C039	254 4254 035	CE04W1C470M	47μF/16V	
C041,042	254 4260 045	CE04W1H010M	1μF/50V	
C050	254 4254 035	CE04W1C470M	47μF/16V	
C054	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)	
C056	254 4260 003	CE04W1H0R1M	0.1μF/50V	
C057	254 4254 035	CE04W1C470M	47μF/16V	
C061	254 4260 045	CE04W1H010M	1μF/50V	
C063,064	254 4254 006	CE04W1C100M	10μF/16V	
C065	254 4260 045	CE04W1H010M	1μF/50V	
C066	254 4256 790	CE04W1E222MC	2200μF/25V	
C067	254 4260 045	CE04W1H010M	1μF/50V	
C070	254 4258 057	CE04W1V101M	100μF/35V	
C074	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)	
C202	254 4250 055	CE04W0J471M	470μF/6.3V	
C203	254 4195 039	CE04W1V220M	22μF/35V	
C204	254 4260 045	CE04W1H010M	22μF/35V	
C301	254 4258 002	CE04W1V4R7M	4.7μF/35V	
(Plastic Film Capacitor)				
C047	255 4201 942	CQ93P1H391J	390pF/50V	
(Metalized Capacitor)				
C016	256 1034 047	CF93A1H563J	0.056μF/50V	
C021	256 1034 034	CF93A1H473J	0.047μF/50V	
C074	256 1034 034	CF93A1H473J	0.047μF/50V	
(Other Capacitor)				
C062	259 0007 702	SB CAP==822=C	8200μF	
TC002	213 0022 008	Trimmer Condencer		
E.U. PARTS				Q'ty
L001,002	235 0020 097	Inductor	39mH	2
SW001	212 0286 003	Power Switch		1
S201～217	212 4388 004	Tact Switch		17
XL001	399 0075 003	X'tal (7.2MHz)		1
XL201	399 0034 002	OSC Element (CST4.00MG)		1
	393 4043 004	FIP10TM7	FLD	1
	205 0274 004	2P Connector Base		1
	499 0088 002	QH3031H0	Remocon Receiver	1
	216 0064 007	Front End		1
	205 0433 010	Ant.Terminal (F)		1
COIL TRANS				Q'ty
T001	231 2076 005	FM IF DFT Trans (P)		1
T002	231 2077 004	FM IF DFT Trans (S)		1
T005	231 1911 103	MW Ant.Trans		1
T007	231 4901 000	MW OSC Coil		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
T008	231 1132 005	AM IFT	SFL450J3	1
CF001,002	261 0025 004	Cermic Filter		2
CF003	261 0031 001	AM Cermic Filter	BFU450C4	1
CF004	261 0079 005	AM Cermic Filter	CSB456F11	1
⚠	233 5752 005	Power Trans		1
OTHER PARTS				Q'ty
◉	—	(P.W. Board)		1
	146 1019 008	LED Holder		1
	412 2268 205	FLD Bracket		1
	205 0343 032	3P Connector Base	KR-PH	1
	205 0343 045	4P Connector Base	KR-PH	1
	205 0343 061	6P Connector Base	KR-PH	2
	205 0343 074	7P Connector Base	KR-PH	1
	205 0343 087	8P Connector Base	KR-PH	1
	473 7002 021	Topping Screw (S) 3×8	BLACK	1
	417 0043 100	Radiator		1
	204 2341 000	10P SAN-SAN Con-Cord		1
	204 2243 043	7P KR-DA Con-Cord		1
	203 6215 058	4P KR-DA Con-Cord		1
	204 0265 007	6P KR-DA Con-Cord		1
	204 2244 071	8P KR-DA Con-Cord		1
	203 4456 068	3P KR-DA Con-Cord		1

3 Band Model
1U-1776B TUNER UNIT PARTS LIST for Europe

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS			
IC001	263 0438 008	LA1266	IC
IC002	263 0439 007	LA3401	IC
IC003	263 0237 005	LA6358	IC
IC004	262 0719 009	LM7001	IC
IC005	263 0571 004	NJM78M12FA	IC
IC006	263 0586 002	NJM78M06FA	IC
IC201	262 1134 007	TMP47C670N-1284	IC
TR001,002	275 0051 909	2SK161 (GR)	FET
TR003	273 0357 908	2SC2839 (E)	Transistor
TR004～006	273 0381 903	JC547A/B AMMO	Transistor
TR007,008	273 0253 015	2SC2878 (A/B)	Transistor
TR009,010	271 0233 903	JC556A/B AMMO	Transistor
TR011	273 0381 903	JC547A/B AMMO	Transistor
TR012,018	271 0233 903	JC556A/B AMMO	Transistor
TR019	273 0381 903	JC547A/B AMMO	Transistor
TR020	275 0053 907	2SK365 (BL/GR)	FET
TR023	273 0381 903	JC547A/B AMMO	Transistor
TR024	271 0233 903	JC556A/B AMMO	Transistor
TR025	273 0381 903	JC547A/B AMMO	Transistor
TR201	273 0381 903	JC547A/B AMMO	Transistor
D001,002	276 0546 909	1SS110	Diode
D003	276 0049 008	1S2076	Diode
D004	276 0432 000	1SS270A	Diode
D005～008	276 0302 004	SVC321D2-SP	Varactor (Replase in pairs)
D009～012	276 0432 000	1SS270A	Diode
D013	276 0049 008	1S2076	Diode
D014	276 0432 000	1SS270A	Diode
D015,016	276 0548 910	DSM1D2	Diode Type-3
D017	276 0405 901	S1WB (A) 10	Diode
D018,019	276 0432 000	1SS270A	Diode
D201～205	276 0432 000	1SS270A	Diode
D208,209	276 0432 000	1SS270A	Diode
D211～213	276 0432 000	1SS270A	Diode
D215	276 0432 903	1SS270A	Diode
D301	276 0432 903	1SS270A	Diode
ZD001,002	276 0218 910	HZ9A-2	Zener
LE201～207	393 9261 027	SEL1321G (D2/3)	LED
RESISTORS (not included Carbon Film ±5%,1/4W Type)			
RA201	246 2053 001	RK99==103JP5	Array 10KΩ×5
CAPACITORS			
(Ceramic Capacitor)			
C001,002	253 1004 007	CK45B1H102K	100pF/50V
C003,004	253 1024 003	CK45F1H103Z	0.01μF/50V
C006～010	253 1024 003	CK45F1H103Z	0.01μF/50V
C015	253 1182 000	CK45F==473Z	0.047μF/25V D=3
C017	253 1055 072	CK45B1H121K	120pF/50V
C026	253 1024 003	CK45F1H103Z	0.01μF/50V
C029,030	253 3639 001	CC45SL1H331J	330pF/50V
C033,034	253 1061 008	CK45B1H272K	2700pF/50V
C035,036	253 1060 009	CK45B1H182K	1800pF/50V
C037,038	253 1059 007	CK45B1H122K	1200pF/50V
C043,044	253 1024 003	CK45F1H103Z	0.01μF/50V
C046	253 3625 002	CC45SL1H820J	82pF/50V
C048	253 3607 004	CC45SL1H150J	15pF/50V
C049	253 1024 003	CK45F1H103Z	0.01μF/50V
C055	253 1025 002	CK45F1H223Z	0.022μF/50V
C058,059	253 3608 003	CC45SL1H160J	16pF/50V
C060	253 1024 003	CK45F1H103Z	0.01μF/50V
C068,069	253 1024 003	CK45F1H103Z	0.01μF/50V

Ref. No.	Part No.	Part Name	Remarks
⚠C071	253 8014 003	CK45F2GAC103M	0.01μF/400V (AC)
C072,073	253 1024 003	CK45F1H103Z	0.01μF/50V
C075	253 1024 003	CK45F1H103Z	0.01μF/50V
C076	253 3605 006	CC45SL1H120J	12pF/50V
C007	253 1024 003	CK45F1H103Z	0.01μF/50V
C078	253 3627 000	CC45SL1H101J	100pF/50V
C079	253 1024 003	CK45F1H103Z	0.01μF/50V
C082	253 1024 003	CK45F1H103Z	0.01μF/50V
C201	253 1024 003	CK45F1H103Z	0.01μF/50V
C204	253 1004 007	CK45B1H102K	1000pF/50V
(Electrolytic Capacitor)			
C005	254 4254 006	CE04W1C100M	10μF/16V
C011	254 4254 035	CE04W1C470M	47μF/16V
C012	254 4258 002	CE04W1V4R7M	4.7μF/35V
C013	254 4254 006	CE04W1C100M	10μF/16V
C014	254 4260 061	CE04W1H3R3M	3.3μF/50V
C018	254 4254 019	CE04W1C220M	22μF/16V
C019	254 4260 045	CE04W1H010M	1μF/50V
C020	254 4254 019	CE04W1C220M	22μF/16V
C022	254 4254 035	CE04W1C470M	47μF/16V
C023	254 4260 045	CE04W1H010M	1μF/50V
C024	254 4260 016	CE04W1HR22M	0.22μF/50V
C025	254 4260 045	CE04W1H010M	1μF/50V
C028	254 4254 006	CE04W1C100M	10μF/16V
C031	254 4258 002	CE04W1V4R7M	4.7μF/35V
C039	254 4254 035	CE04W1C470M	47μF/16V
C041,042	254 4260 045	CE04W1H010M	1μF/50V
C050	254 4254 035	CE04W1C470M	47μF/16V
C054	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)
C056	254 4260 045	CE04W1H010M	1μF/50V
C057	254 4254 035	CE04W1C470M	47μF/16V
C061	254 4260 045	CE04W1H010M	1μF/50V
C063,064	254 4254 006	CE04W1C100M	10μF/16V
C065	254 4260 045	CE04W1H010M	1μF/50V
C066	254 4256 790	CE04W1E222MC	2200μF/25V
C067	254 4260 045	CE04W1H010M	1μF/50V
C070	254 4258 057	CE04W1V101M	100μF/35V
C074	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)
C202	254 4250 055	CE04W0J471M	470μF/6.3V
C203	254 4195 039	CE04W1V220M	22μF/35V
C204	254 4260 045	CE04W1H016M	1μF/50V
C301	254 4258 002	CE04W1V4R7M	4.7μF/35V
(Plastic Film Capacitor)			
C045	255 4200 969	CQ93P1H181J	180pF/50V
C047	255 4201 942	CQ93P1H391J	390pF/50V
(Metalized Capacitor)			
C016	256 1034 047	CF93A1H563J	0.056μF/50V
C021	256 1034 034	CF93A1H473J	0.047μF/50V
(Other Capacitor)			
C062	259 0007 003	SB CAP==822=	8200μF
TC001	213 0037 006	Trimmer Condencer	
TC002	213 0022 008	Trimmer Condencer	

E.U. PARTS				Q'ty
L001,002	235 0020 097	Inductor	39mH	2
SW001	212 0286 003	Power Switch		1
S201～217	212 4388 004	Tact Switch		17
XL001	399 0075 003	X'tal (7.2MHz)		1
XL201	399 0034 002	OSC Element (CST4.00MG)		1
	393 4043 004	FIP10TM7	FLD	1
	205 0274 004	2P Connector Base		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
	216 0065 006	Front End (J)		1
	205 0433 007	3P Ant.Terminal (DIN)		1
COIL TRANS				Q'ty
T001	231 2076 005	FM IF DFT Trans (P)		1
T002	231 2077 004	FM IF DFT Trans (S)		1
T003	232 0096 006	Anti Birdie FIlter		1
T004	231 1133 004	LW Ant.Trans		1
T005	231 1911 103	MW Ant.Trans		1
T007	231 1118 003	MW OSC Coil		1
T006	231 1135 002	LW OSC Coil		1
T008	231 1132 005	AM IFT	SFL450J3	1
CF001,002	261 0064 007	Cermic Filter	SFT10.7MS2	2
CF003	261 0101 009	AM Cermic Filter	BFU450C4	1
CF004	261 0103 007	AM Cermic Filter	CSB456F11	1
⚠	233 5720 008	Power Trans		1
OTHER PARTS				Q'ty
◉	—	(P.W. Board)		1
	146 1019 008	LED Holder		1
	412 2268 205	FLD Bracket		1
	205 0343 045	4P Connector Base	KR-PH	1
	205 0343 061	6P Connector Base	KR-PH	2
	205 0343 074	7P Connector Base	KR-PH	1
	205 0343 087	8P Connector Base	KR-PH	1
	473 7002 021	Tapping Screw (S) 3×8	BLACK	1
	415 0299 000	Condenser Cover		1
	417 0043 100	Radiator		1
	204 2341 000	10P SAN-SAN Con. Cord		1
	204 2243 043	7P KR-DA Con. Cord		1
	203 6215 058	4P KR-DA Con. Cord		1
	204 0265 007	6P KR-DA Con. Cord		1
	204 2244 071	8P KR-DA Con. Cord		1
	203 4456 068	3P KR-DA Con. Cord		1

1U-1776C TUNER UNIT PARTS LIST for U.K.

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS			
IC001	263 0438 008	LA1266	IC
IC002	263 0439 007	LA3401	IC
IC003	263 0237 005	LA6358	IC
IC004	262 0719 009	LM7001	IC
IC005	263 0571 004	NJM78M12FA	IC
IC006	263 0586 002	NJM78M06FA	IC
IC201	262 1134 007	TMP47C670N-1284	IC
TR001,002	275 0051 909	2SK161 (GR)	FET
TR003	273 0357 908	2SC2839 (E)	Transistor
TR004~006	273 0381 903	JC547A/B AMMO	Transistor
TR007,008	273 0253 015	2SC2878 (A/B)	Transistor
TR009,010	271 0233 903	JC556A/B AMMO	Transistor
TR011	273 0381 903	JC547A/B AMMO	Transistor
TR012,018	271 0233 903	JC556A/B AMMO	Transistor
TR019	273 0381 903	JC547A/B AMMO	Transistor
TR020	275 0053 907	2SK365 (BL/GR)	FET
TR023	273 0381 903	JC547A/B AMMO	Transistor
TR024	271 0233 903	JC556A/B AMMO	Transistor
TR025	273 0381 903	JC547A/B AMMO	Transistor
TR201	273 0381 903	JC547A/B AMMO	Transistor
D001,002	276 0546 909	1SS110	Diode
D003	276 0049 008	1S2076	Diode
D004	276 0432 000	1SS270A	Diode
D005	276 0302 004	SVC321D2-SP	Varactor (Replase in pairs)
D009~012	276 0432 000	1SS270A	Diode
D013	276 0049 008	1S2076	Diode
D014	276 0432 000	1SS270A	Diode
D015,016	276 0548 910	DSM1D2	Diode Type-3
D017	276 0405 901	S1WB (A) 10	Diode
D018,019	276 0432 000	1SS270A	Diode
D201~205	276 0432 000	1SS270A	Diode
D208,209	276 0432 000	1SS270A	Diode
D211~213	276 0432 000	1SS270A	Diode
D215	276 0432 903	1SS270A	Diode
D301	276 0432 903	1SS270A	Diode
ZD001,002	276 0218 910	HZ9A-2	Zener
LE201~207	393 9261 027	SEL1321G (D2/3)	LED
RESISTORS (not included Carbon Film ±5%,1/4W Type)			
RA201	246 2053 001	RK99==103JP5	Array 10KΩ×5
CAPACITORS			
(Ceramic Capacitor)			
C001,002	253 1004 007	CK45B1H102K	100pF/50V
C003,004	253 1024 003	CK45F1H103Z	0.01μF/50V
C006~010	253 1024 003	CK45F1H103Z	0.01μF/50V
C015	253 1182 000	CK45F==473Z	0.047μF/25V D=3
C017	253 1055 072	CK45B1H121K	120pF/50V
C026	253 1024 003	CK45F1H103Z	0.01μF/50V
C029,030	253 3639 001	CC45SL1H331J	330pF/50V
C033,034	253 1061 008	CK45B1H272K	2700pF/50V
C035,036	253 1060 009	CK45B1H182K	1800pF/50V
C037,038	253 1059 007	CK45B1H122K	1200pF/50V
C043,044	253 1024 003	CK45F1H103Z	0.01μF/50V
C046	253 3625 002	CC45SL1H820J	82pF/50V
C048	253 3607 004	CC45SL1H150J	15pF/50V
C049	253 1024 003	CK45F1H103Z	0.01μF/50V
C055	253 1025 002	CK45F1H223Z	0.022μF/50V
C058,059	253 3608 003	CC45SL1H160J	16pF/50V
C060	253 1024 003	CK45F1H103Z	0.01μF/50V
C068,069	253 1024 003	CK45F1H103Z	0.01μF/50V

Ref. No.	Part No.	Part Name	Remarks
⚠C071	253 8014 003	CK45F2GAC103M	0.01μF/400V (AC)
C072,073	253 1024 003	CK45F1H103Z	0.01μF/50V
C075	253 1024 003	CK45F1H103Z	0.01μF/50V
C076	253 3605 006	CC45SL1H120J	12pF/50V
C007	253 1024 003	CK45F1H103Z	0.01μF/50V
C078	253 3627 000	CC45SL1H101J	100pF/50V
C079	253 1024 003	CK45F1H103Z	0.01μF/50V
C082	253 1024 003	CK45F1H103Z	0.01μF/50V
C201	253 1024 003	CK45F1H103Z	0.01μF/50V
C204	253 1004 007	CK45B1H102K	1000pF/50V
(Electrolytic Capacitor)			
C005	254 4254 006	CE04W1C100M	10μF/16V
C011	254 4254 035	CE04W1C470M	47μF/16V
C012	254 4258 002	CE04W1V4R7M	4.7μF/35V
C013	254 4254 006	CE04W1C100M	10μF/16V
C014	254 4260 061	CE04W1H3R3M	3.3μF/50V
C018	254 4254 019	CE04W1C220M	22μF/16V
C019	254 4260 045	CE04W1H010M	1μF/50V
C020	254 4254 019	CE04W1C220M	22μF/16V
C022	254 4254 035	CE04W1C470M	47μF/16V
C023	254 4260 045	CE04W1H010M	1μF/50V
C024	254 4260 016	CE04W1HR22M	0.22μF/50V
C025	254 4260 045	CE04W1H010M	1μF/50V
C028	254 4254 006	CE04W1C100M	10μF/16V
C031	254 4258 002	CE04W1V4R7M	4.7μF/35V
C039	254 4254 035	CE04W1C470M	47μF/16V
C041,042	254 4260 045	CE04W1H010M	1μF/50V
C050	254 4254 035	CE04W1C470M	47μF/16V
C054	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)
C056	254 4260 045	CE04W1H010M	1μF/50V
C057	254 4254 035	CE04W1C470M	47μF/16V
C061	254 4260 045	CE04W1H010M	1μF/50V
C063,064	254 4254 006	CE04W1C100M	10μF/16V
C065	254 4260 045	CE04W1H010M	1μF/50V
C066	254 4256 790	CE04W1E222MC	2200μF/25V
C067	254 4260 045	CE04W1H010M	1μF/50V
C070	254 4258 057	CE04W1V101M	100μF/35V
C074	254 3056 014	CE04D1H010MBP	1μF/50V (By Pole)
C202	254 4250 055	CE04W0J471M	470μF/6.3V
C203	254 4195 039	CE04W1V220M	22μF/35V
C204	254 4260 045	CE04W1H016M	1μF/50V
C301	254 4258 002	CE04W1V4R7M	4.7μF/35V
(Plastic Film Capacitor)			
C045	255 4200 969	CQ93P1H181J	180pF/50V
C047	255 4201 942	CQ93P1H391J	390pF/50V
(Metalized Capacitor)			
C016	256 1034 047	CF93A1H563J	0.056μF/50V
C021	256 1034 034	CF93A1H473J	0.047μF/50V
(Other Capacitor)			
C062	259 0007 003	SB CAP==822=	8200μF
TC001	213 0037 006	Trimmer Condencer	
TC002	213 0022 008	Trimmer Condencer	
E.U. PARTS			Q'ty
L001,002	235 0020 097	Inductor	39mH 2
SW001	212 0286 003	Power Switch	1
S201~217	212 4388 004	Tact Switch	17
XL001	399 0075 003	X'tal (7.2MHz)	1
XL201	399 0034 002	OSC Element (CST4.00MG)	1
	393 4043 004	FIP10TM7	FLD 1
	205 0274 004	2P Connector Base	1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
	216 0065 006	Front End (J)		1
	205 0433 007	3P Ant.Terminal (DIN)		1
COIL TRANS				Q'ty
T001	231 2076 005	FM IF DFT Trans (P)		1
T002	231 2077 004	FM IF DFT Trans (S)		1
T003	232 0096 006	Anti Birdie Filter		1
T004	231 1133 004	LW Ant.Trans		1
T005	231 1911 103	MW Ant.Trans		1
T007	231 1118 003	MW OSC Coil		1
T006	231 1135 002	LW OSC Coil		1
T008	231 1132 005	AM IFT	SFL450J3	1
CF001,002	261 0064 007	Cermic Filter	SFT10.7MS2	2
CF003	261 0101 009	AM Cermic Filter	BFU450C4	1
CF004	261 0103 007	AM Cermic Filter	CSB456F11	1
⚠	237 5748 006	Power Trans		1
OTHER PARTS				Q'ty
◉	—	(P.W. Board)		1
	146 1019 008	LED Holder		1
	412 2268 205	FLD Bracket		1
	205 0343 045	4P Connector Base	KR-PH	1
	205 0343 061	6P Connector Base	KR-PH	2
	205 0343 074	7P Connector Base	KR-PH	1
	205 0343 087	8P Connector Base	KR-PH	1
	473 7002 021	Tapping Screw (S) 3X8	BLACK	1
	415 0299 000	Condenser Cover		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
	417 0043 100	Radiator		1
	204 2341 000	10P SAN-SAN Con. Cord		1
	204 2243 043	7P KR-DA Con. Cord		1
	203 6215 058	4P KR-DA Con. Cord		1
	204 0265 007	6P KR-DA Con. Cord		1
	204 2244 071	8P KR-DA Con. Cord		1
	203 4456 068	3P KR-DA Con. Cord		1

NOTE FOR PARTS LIST

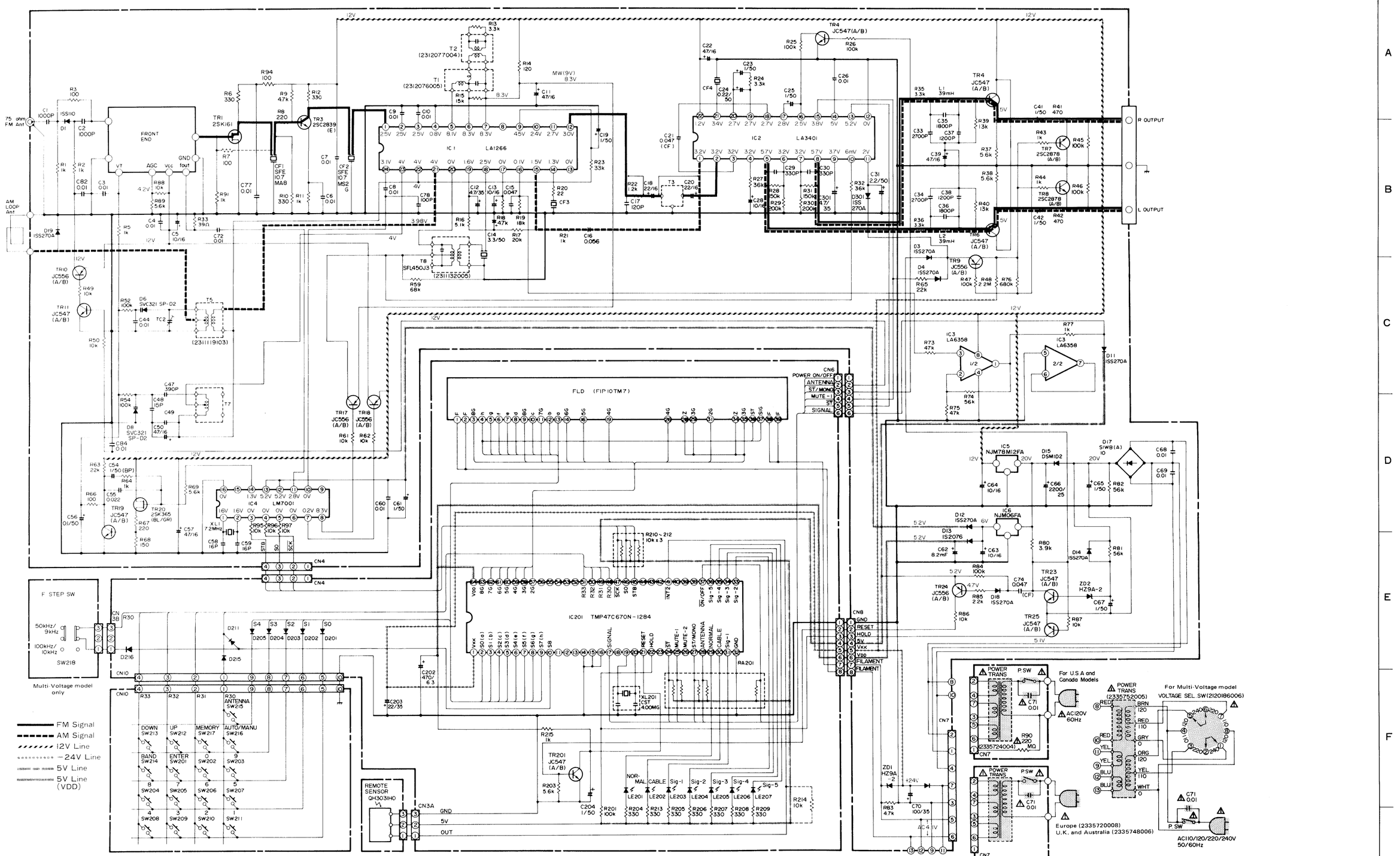
- Part indicated with the Mark "◉ " are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark " ★ " is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W. Board parts list (Refer to Schematic Diagram for those parts.)

WARNING:

Parts marked with this symbol ⚠ ▨ have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.

SCHEMATIC DIAGRAM (for 2 Band Model)



Note:

	Unit No.	TR1, 2	TR9,10,17,18,24	TR4,5,6,11,19,23,25,201	D211	D215	D216	R3	R6	R7	R19	R22	R23	R27	R28,31	R29,30	R39,40	R88	R89	R94	R214	C18	C20	C29,30	C77	T3	T7	CF1,2	POWER TRANS	AC CORD	FRONT END	SLIDE SW	REMOTE SENSOR
Europe	1U-1776	2SK161 (GR)	JC556 (A/B)	JC547 (A/B)	YES	YES	NONE	100	330	NONE	18k	1.2k	39k	43k	150k	200k	15k	10k	5.6k	100	10k	22/16	22/16	330p	0.01	○	231 1118 003	SFT10.7MS$_2$	233 5720 008	206 2063 009	216 0065 006	—	NONE
USA & Canada	1U-1775B	NONE	2SA1048 (Y/GR)	2SC2458 (Y/GR)	NONE	JUMPER	NONE	180	NONE	100	20k	JUMPER	18k	51k	100k	120k	12k	NONE	NONE	NONE	—	10/16	JUMPER	750p	NONE	JUMPER	231 4901 000	SFE10.7MA8	233 5724 004	206 2060 002	216 0064 007	—	YES
U.K. & Australia	1U-1776	2SK161 (GR)	JC556 (A/B)	JC547 (A/B)	YES	YES	NONE	100	330	NONE	18k	1.2k	39k	43k	150k	120k	15k	10k	5.6k	100	10k	22/16	22/16	330p	0.01	○	231 1118 003	SFT10.7MS$_2$	233 5748 006	206 2063 009	216 0065 006	—	NONE
Multi-Voltage	1U-1775C	NONE	2SA1048 (Y/GR)	2SC2458 (Y/GR)	NONE	YES	YES	180	NONE	100	18k	JUMPER	33k	51k	100k	120k	12k	NONE	NONE	NONE	—	10/16	JUMPER	510p	NONE	JUMPER	231 4901 000	SFE10.7MA8	233 5752 005	200 6031 026	216 0064 007	212 4293 005	YES

Other
- 1. Europe TR4, 5, 6, 11, 19, 23, 25. 201 2SC2458 (Y/GR) or JC547 (A/B)
  TR9, 10, 17, 18, 24 2SA1048 (Y/GR) or 556 (A/B)
- 2. U.S.A. Canada TR4, 5, 6, 11, 19, 23, 25, 201 2SC2458 (Y/GR)
  & Multi Voltage TR9, 10, 17, 18, 24 2SA1048 (Y/GR)
- D211, 215, 216 : 1SS270A

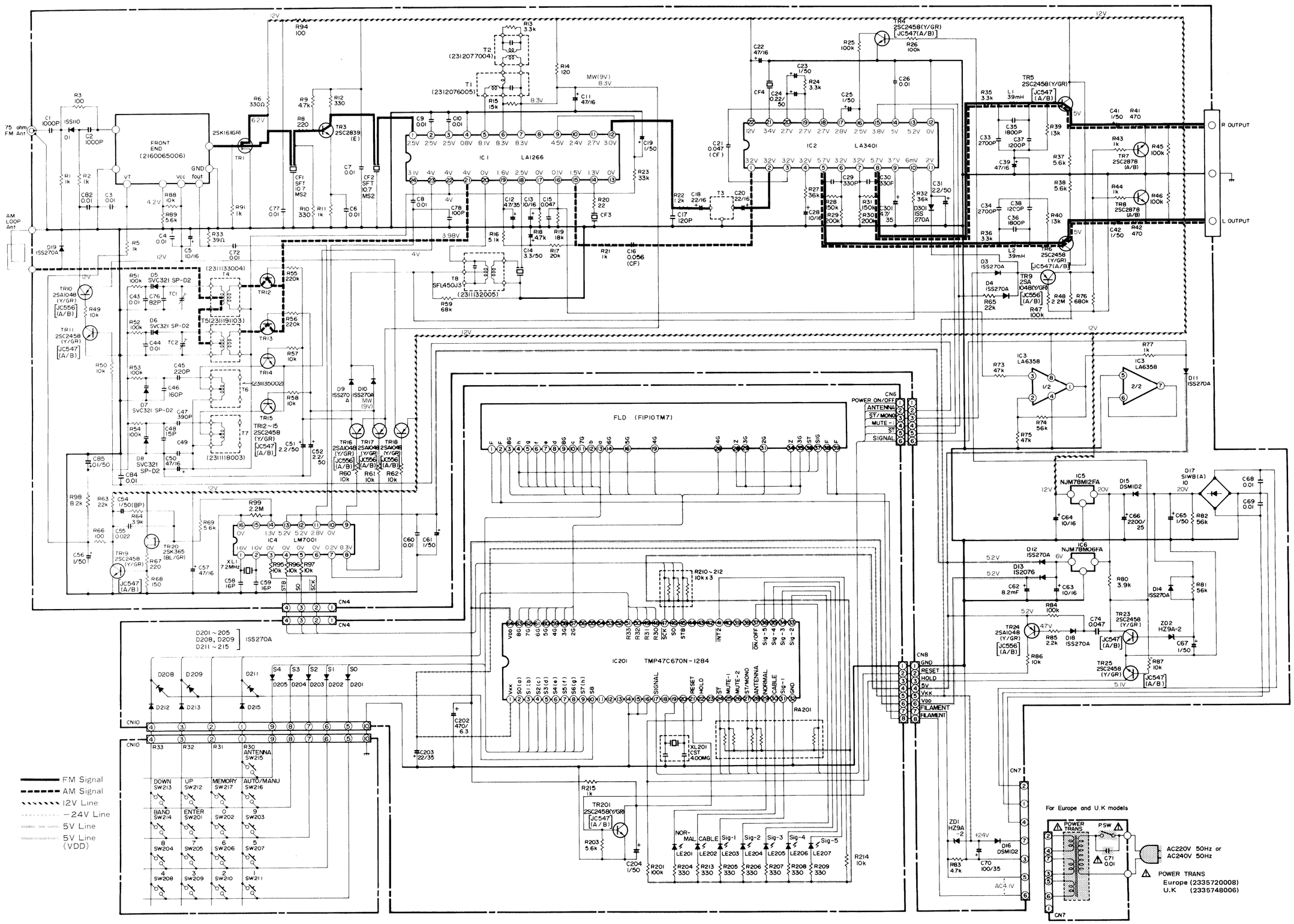
WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 240 k ohms, the unit is defective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

NOTES
ALL RESISTANCE VALUES IN OHM K= 1,000 OHM M= 1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD P= MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

SCHEMATIC DIAGRAM (for 3 Band Model)



Note:

	Unit No.	POWER TRANS	AC CORD
Europe	1U-1776B	233 5720 008	206 2063 009
U.K.	1U-1776C	233 5748 006	206 2024 006

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 240 k ohms, the unit is defective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

NOTES
ALL RESISTANCE VALUES IN OHM K†1,000 OHM M†1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD P†MICRO-MICRO FARAP
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDIT
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DENON

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